REPORT RESUMES

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SEAFOOD MERCHANDISING, A GUIDE FOR TRAINING PROGRAMS.

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GUIDELINES ARE SUGGESTED FOR THE PROMOTION AND ORGANIZATION OF TRAINING PROGRAMS THAT WILL AID IN THE ORDERLY DISTRIBUTION OF FISHERY PRODUCTS TO THE CONSUMER. THE MATERIAL WAS DEVELOPED AS A RESULT OF A RESEARCH PROJECT CONDUCTED BY THE EDUCATIONAL SERVICE BUREAU AND THE DISTRIBUTIVE EDUCATION SERVICE OF TEMPLE UNIVERSITY. CHAPTERS IN THE GUIDE ARE -- (1) THE SEAFOOD INDUSTRY AND ITS PROBLEMS, (2) ORGANIZING AND OPERATING A SEAFOOD MERCHANDISING PROGRAM WHICH INCLUDES PERSONNEL REQUIREMENTS, FINANCIAL ARRANGEMENTS, STUDENT CLASSIFICATION, AND TEACHING PROCEDURES, (3) CURRICULUMS FOR SEAFOOD MERCHANDISING TRAINING COURSES WHICH INCLUDES PROCEDURES FOR MANAGEMENT, SUPERVISORY, AND OPERATIONAL PERSONNEL, TECHNIQUES OF WHOLESALING, AND PRODUCTS INFORMATION FOR CONSUMER EDUCATORS AND MASS FEEDERS, AND (4) A SAMPLE SEAFOOD MERCHANDISING COURSE WHICH INCLUDES OUTLINES OF 11 TOPICS MOST LIKELY TO BE USED IN INSTRUCTION. THE APPENDIX INCLUDES SOURCES OF INSTRUCTIONAL MATERIALS, A LIST OF SEAFOOD MERCHANDISING CLINICS PREVIOUSLY CONDUCTED, ACTIVITIES OF THE BUREAU OF COMMERCIAL FISHERIES, FISHERY LEGISLATION RELATIVE TO RESEARCH AND TRAINING, AND REFERENCES ON SEAFOOD MERCHANDISING. THIS DOCUMENT IS AVAILABLE AS GPO NUMBER FS 5.282--82014 FOR 30 CENTS FROM SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402. (PS)

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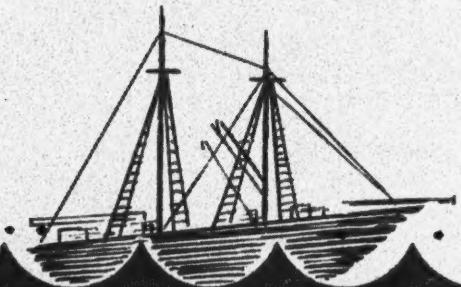

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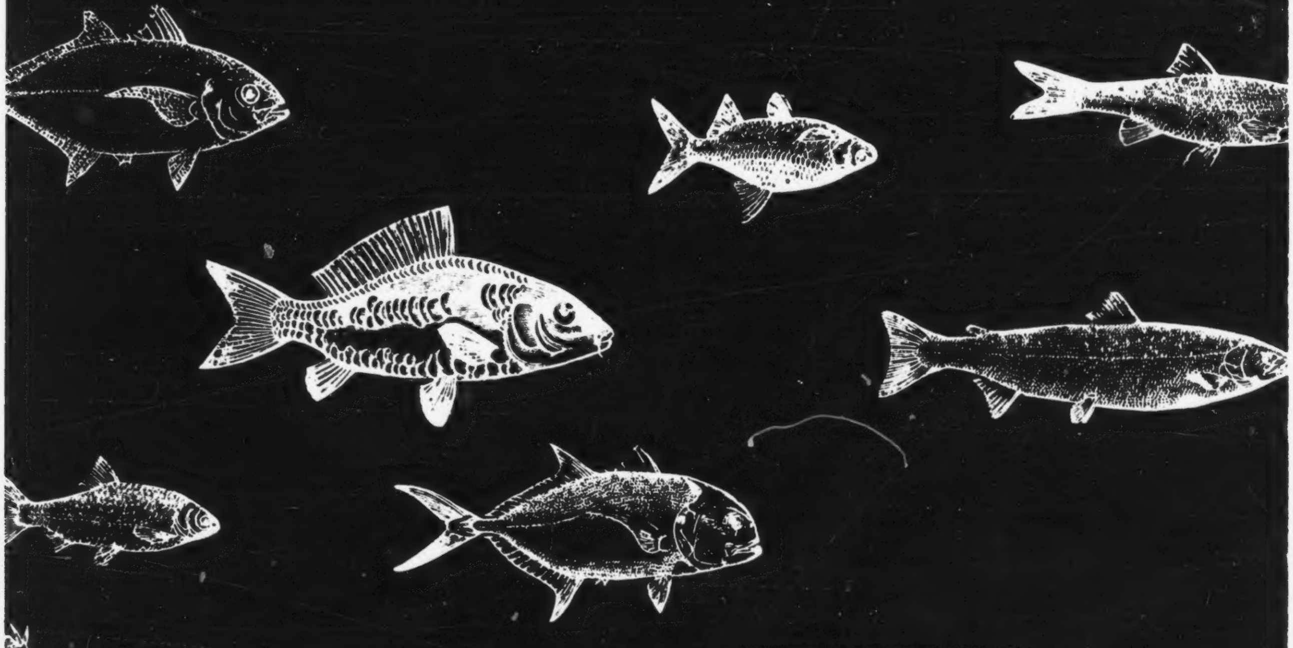

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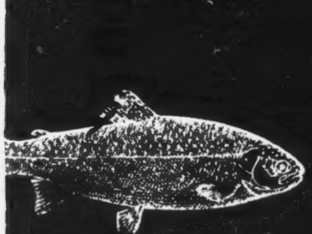

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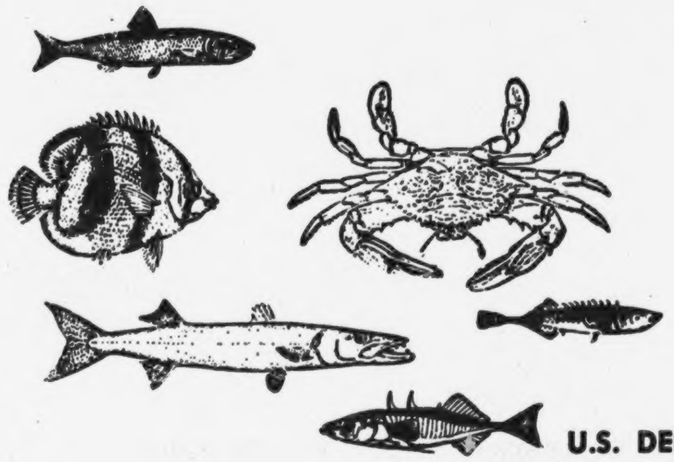
Seafood Merchandising

A GUIDE FOR TRAINING PROGRAMS



U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Anthony J. Celebrezze, Secretary

Office of Education
Francis Keppel, Commissioner

Foreword

THE 85TH CONGRESS recognized the importance of the seafood industry to the economy and welfare of the Nation by the passage of Public Law 1027 in 1956. The stated purpose of this legislation is to promote the fishing industry in the United States and its Territories by providing for the training of needed personnel for such industry. This bulletin suggests guidelines for the promotion and organization of training programs that will aid in the orderly flow of fishery products to the consumer. At the suggestion of the U.S. Office of Education, the Pennsylvania State Board for Vocational Education requested Temple University to undertake a research project which would develop curriculum materials that could be published for national use. This research project was conducted by the Educational Service Bureau and the Distributive Education Service of Temple University.

Sincere appreciation is extended to the Pennsylvania State Board for Vocational Education, Harrisburg; to Temple University, Philadelphia; to the U.S. Department of the Interior and to the following individuals for their efforts to make available this curriculum guide for use throughout the Nation:

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Walter M. Arnold,
Assistant Commissioner for Vocational and Technical Education.

Contents

Page
Foreword -- iii

Chapter I. The Seafood Industry and Its Problems ------ 1
Distribution Channels ---------------------- 3
Marketing Problems ------------------------ 5
Need for Education ------------------------ 6

Chapter II. Organizing and Operating a Seafood Merchandising Program ------------------------ 7
Elements in the Program ------------------ 7
The Coordinator -------------------------- 8
The Advisory Committee ------------------ 8
Enlisting Leaders ------------------------- 9
Organizing the Course -------------------- 9
Financial Arrangements ------------------ 10
Personnel -------------------------------- 10
Other Expenses -------------------------- 11
Materials -------------------------------- 11
Promotion -------------------------------- 11
Timing ----------------------------------- 12
Student Classification and Requirements ------ 12
Teaching Approach ------------------------ 12
The First Meeting ------------------------ 12
Teaching Methods ------------------------ 13
Evaluation ------------------------------- 14
Followup -------------------------------- 15
Seafood Merchandising Clinic ------------- 15
Course Evaluation ------------------------ 16

Chapter III. Curriculums for Seafood Merchandising Training Courses ------------------------------ 18
1. Retail Seafood Business—Management and Supervisory Level Personnel—6 sessions-- 18

Page

2. Retail Seafood Business—Management and Supervisory Level Personnel—1-day seminar ---------- 20
3. Retail Seafood Business—Operational Level Personnel—5 sessions ---------- 21
4. Retail Seafood Business—Operational Level Personnel—1-day seminar ---------- 22
5. Retail Seafood Business—Operational Level Personnel—1-day seminar ---------- 22
6. Retail Seafood Business—Wholesaling—10 sessions ---------- 24
7. Retail Seafood Business—Wholesaling—1-day seminar ---------- 25
8. Consumer Educators—4 sessions ---------- 26
9. Mass Feeders—5 sessions ---------- 27

Chapter IV. A Sample Seafood Merchandising Course ---------- 29

1. Introduction ---------- 31
2. General Fisheries Information ---------- 31
3. Product Information ---------- 35
4. Promotional Activities for the Seafood Industry and Seafood Department ---------- 38
5. Principles of Salesmanship for the Seafood Department ---------- 43
6. Operating a Seafood Business ---------- 44
7. Supervisory Techniques ---------- 48
8. Economics of Seafood Merchandising ---------- 49
9. Nutritional Value, Preparation, and Cooking of Seafood ---------- 55
10. Trends in Seafood and Seafood Merchandising ---------- 60
11. Government Role in Seafood Merchandising 62

Appendix ---------- 65

CHAPTER I

The Seafood Industry and Its Problems

JUDGED FROM THE STANDPOINT of size, number of people employed, amount of dollar wealth produced, the fishing industry is a huge and important one. Annual sales of fishery products in the United States approach $2 billion. Fishing is important to the American economy and diet.

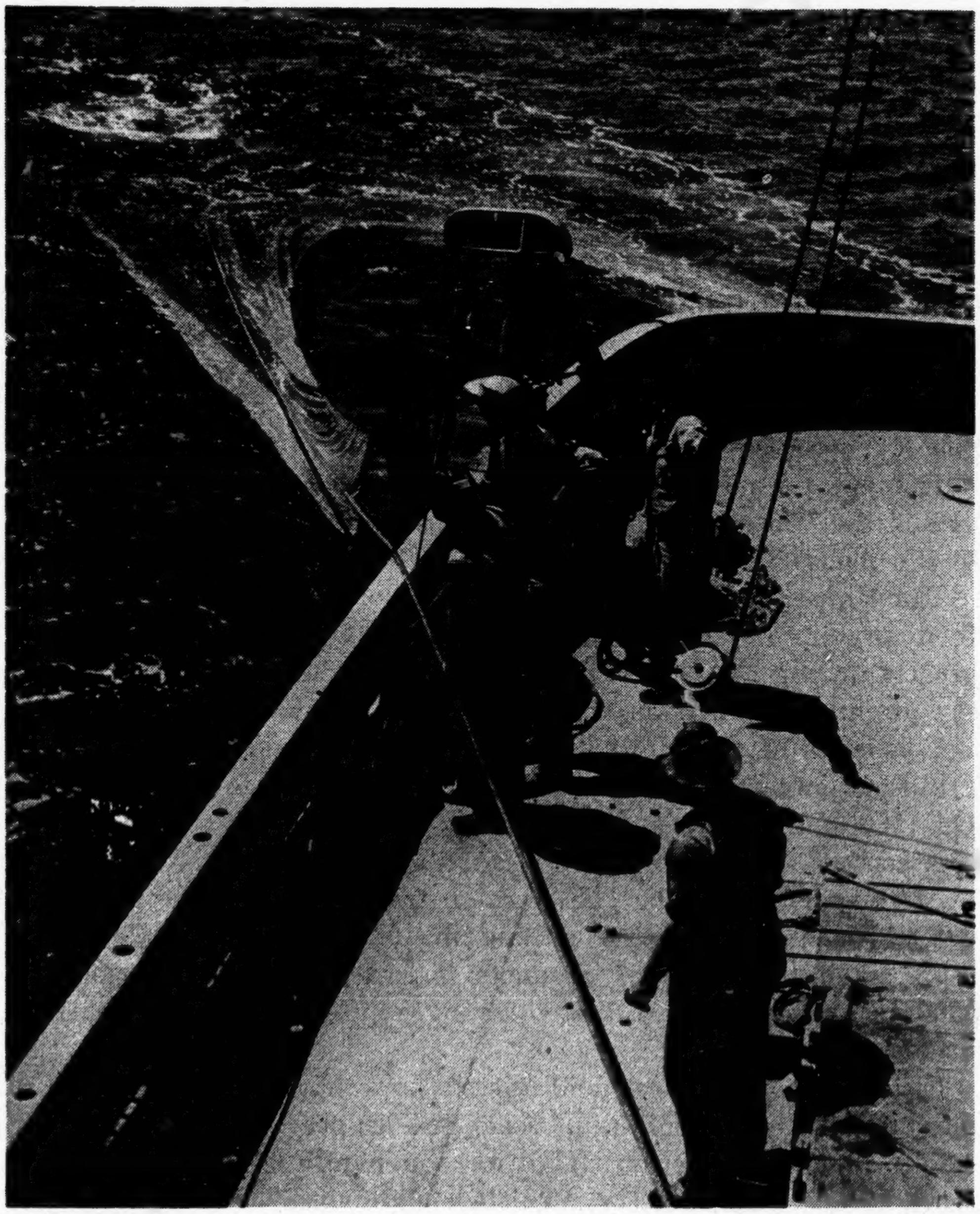
The United States ranks fifth in the world in the volume of seafood produced. Although the total production has not varied greatly during the past 10 years, the total value of the various fishery products has increased considerably. The yield of the commercial fisheries of the United States in 1940 amounted to more than 4 billion pounds, valued at almost $100 million to the fishermen. By 1963, the yield was 4.6 billion pounds, and the value had increased to $388 million.

At the same time, the U.S. foreign trade in fishery products was valued at more than $511 million in 1962, of which $475 million represented the value of products imported for consumption and $36 million represented the value of exports of domestic fishery products.

Fishermen, processors, and distributors have an investment of more than a billion dollars in boats, fishing gear, freezing and processing plants, and other facilities for handling products at the retail level. The industry furnishes employment for about 130,000 fishermen on about 12,000 fishing vessels of 5 net tons or more, and on 65,000 other boats. In 1962, more than 92,000 persons were employed in wholesale and manufacturing establishments. Fishery products were canned by 365 firms in the United States, Puerto Rico, and American Samoa; industrial fishery products were manufactured by 158 plants; and 343 million pounds of fish products were frozen.

The future for the fishing industry should be bright. By 1970, it is predicted that—

- The total population of the United States will be 215 million people.
- The biggest increase will be in the 20- to 29-year-old age group.



Casting out the net

- **There will be more families. Young married women will be more nutrition conscious, more aware of the quality and convenience of seafood.**
- **Average family income will up 50 percent.**
- **We will need to produce three times today's total of fish.**

The fishing industry is important, not only because of its place in our economy, but also as the source of an essential food.

- **Seafoods are *nutritious*. They contain vitamins, minerals, and protein. Seafoods do not have the connective tissue of land meats. Because seafoods are easily digestible, they are particularly important in diets for the very young and for the elderly.**

- **Seafoods offer *variety*. More than 160 different domestic varieties are sold.**
- **Seafoods offer special *diet advantages*. They are excellent for weight watchers. The fats they contain are much more polyunsaturated than those of other animals and most vegetables.**

Distribution Channels

Seafood is sold and used in the United States in fresh, frozen, canned, and processed forms.

The *producer*, in the United States or in ports throughout the world, usually is the individual fisherman or a member of a fishermen's cooperative or fleet of fishing boats. He brings his catch to the local dock in fresh, live, or frozen form. In most cases, the *processor* takes the fresh seafood to his nearby plant for packaging in bulk or in consumer packs for fresh seafood, for freezing, canning, curing, and cooking of other processed products. In some instances fresh fish is taken directly from the *producer* by the *wholesaler* in his own trucks.

The *processor* usually distributes his products through the locally franchised distributor or *broker.*

The *broker* sells processed seafoods to the *wholesaler*, who usually maintains warehouses for the storage of the products.

The wholesaler also trains his salesmen who sell to the cooperative retailer group *independent grocers*, the *chain store or supermarket warehouse*, and directly to the *mass feeding outlet.*

The individual retailer[1] who sells seafood in any form usually obtains it through his *cooperative association* or from the *wholesaler's* warehouse.

In some cases the *producer* is also the *processor* of the seafood. Some processors also maintain their own sales force (manufacturer's representatives) who make direct contact with the *wholesaler*, *chain store office*, *retailer*, and *mass feeder.*

Seafood that is to be sold as "fresh" is often bought at the dock by the *wholesaler*, *chain store warehouse*, or *mass feeder.* Government agencies or military installations buy directly from the *producer.*

In coastal areas it is not uncommon to find all of the distributive functions assumed by one individual firm: the fleet of boats is owned by "Captain Joe"; his kitchens for *processing* the daily catch are on the dock; he *packages* and *merchandises* the seafood for sale at small *retail stores* on his pier; he processes the product for ship-

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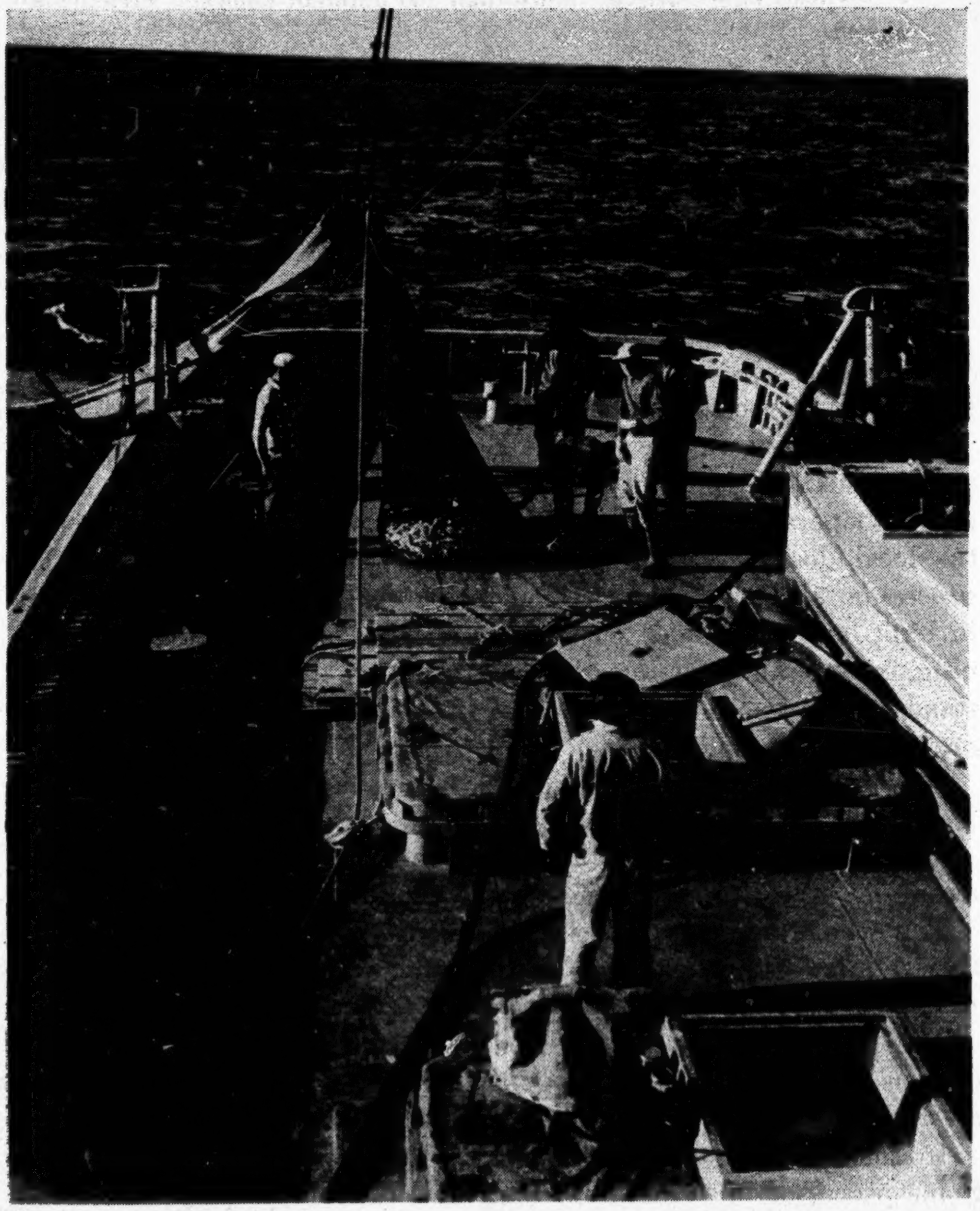
[1] Cooperative association, wholesaler, or distributor.



Landing the catch

ment to other *retailers* and *mass feeding outlets* in his local area or even at distant points; and he cooks the seafood for service at his seafood *restaurant.* The *consumer* may purchase seafood live or fresh-caught; frozen, packaged and processed; canned, cured, in portions, in precooked dishes and dinners, or as part of a meal served to him at a restaurant on the pier.

Training is needed for the personnel of all these seafood merchandisers, including—

Producer
Processor
Wholesaler

Chain Store Warehouse workers
Cooperative Retailers Association members
Mass Feeding Outlet workers—restaurant, hotel, institution, caterer, industrial cafeteria, military installations, etc.
Retailers—chain store, seafood dealer, grocer, delicatessen, etc.

Marketing Problems

The need for merchandising training is clear when the record of the fishing industry is examined. Once a keystone of private enterprise, the fishing industry is now a soft spot in the national economy. It is an industry beset by many problems. It is old, conservative, fragmented, and too prone to uncoordinated independent action. It is beset and threatened by foreign competition, archaic laws, the vagaries of nature, and the high cost of modernization and mechanization.[2]

The marketing problems confronting the seafood industry are serious.

1. It is concerned with highly perishable merchandise.
2. It is widely scattered throughout the country and all segments of the industry are found in all parts of the country.
3. Internal conflict is prevalent.
   a. Profit-sharing controversies on the production level arise, because fishermen do not receive regular wages.
   b. The fresh, frozen, canned, and precooked specializations of the industry are highly competitive with one another.
4. There has been a decline in fish population. Some of the most important food fish have become increasingly difficult to obtain in recent years.
5. Foreign competition is keen. It is estimated that well over 50 percent of the frozen fish sold in this country is imported.
6. Sales difficulties in the seafood industry are persistent and troublesome.
   a. The American consumer has a preference for meats.
   b. Religious customs and habit create strongest demand on 1 day of the week and during certain seasons.
   c. The distribution system creates wholesale markups as high as 40 percent and retail markups as high as 100 percent.
   d. Retailing requires expensive equipment and display fixtures.
   e. Many retailers carry seafood as a convenience item for customers, claiming that there is little profit in the line.

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[2] Smith, Benjamin A. Our Fishing Fleet Comes in Fifth. *New York Times Magazine*, Oct. 7, 1962.

f. In most food chain operations the fish department is an appendage to the meat department, serviced by people whose principal responsibility is for selling meats.

g. Qualified countermen are in short supply.

Although these problems are widely recognized within the industry, they are not yet as clearly recognized generally, but headway is being made. Hopefully, with understanding of the problems, corrective action programs will be developed and the industry—basic as it is—will prosper.

Need for Education

As important as are other elements in a forward-looking program for the industry, none is more important than the expansion of the consumer market. The demand for fishery products can be increased by more widespread education about them. It is to this end that this guide for training programs is directed; for courses, such as those described in these pages, should, as they are formed and carried on, encourage greater consumption of seafood.

Distributive education has a responsibility for helping those who earn their living in the seafood industry to do something about their marketing problems. Evaluations, studies, and analyses of courses offered for the seafood industry indicate that typically, they result in these benefits:

1. Greater understanding of the seafood industry
2. Improved product information
3. Advanced sales techniques
4. Improved handling techniques and practices
5. Better supervisory techniques

A number of important intangible results can also be effected. Training courses have the potential of—

- Enabling enrollees to keep up with the changes and latest trends in the business
- Raising the morale of personnel, especially by giving added status to their work
- Providing incentives for people to stay on the job or in the business
- Establishing contacts and business relationships

CHAPTER II

Organizing and Operating a Seafood Merchandising Program

BEFORE EMBARKING ON A TRAINING VENTURE it is well to build up background information that can be used in promoting the courses. Accurate information, such as may be gained from a survey, provides the proper basis for projecting plans.

In conducting surveys for courses in the seafood industry it is important to find the industry's place in the State and local community. In order to establish a proper climate for training, the following significant factors should be known:

1. What is its money volume of the industry in the area?
2. What are the types of fish marketing?
3. How many people are employed?
4. What kinds of occupations are represented?
5. What are the distribution and production centers?
6. What are the channels of distribution?
7. What are the seafood consumption patterns in the area?
8. What is the stability of the market and trade?
9. What is the relative importance of seafood as a product in the area?
10. What are the prevailing customs in the area's seafood industry? Which are strengths and which are barriers to progress?
11. What skills and understandings are specifically involved in the area's seafood merchandising?
12. What has already been done in training in the area?
13. What groups are concerned with the need for training?

Elements in the Program

Plans for organizing the course can be made once the survey of local needs establishes the fact that training courses will be of value.

Motivational aspects in promoting a course in seafood merchandising should be considered. Getting individuals and companies to participate in training courses is not an easy matter in an industry where it is the practice to place the blame for shortcomings on other segments. Moreover, many merchants feel that enough training can be done on the job. Some merchants feel, also, that they have developed some "trade tricks" that should not be divulged in training sessions.

The most persuasive way of answering such objections is to come to the core questions: Could your fish department be better managed? Could your countermen do a better selling job? If the answers are in the affirmative, and they almost invariably will be, then the need for a training course can be established. Chainstore personnel directors know of the reluctance of people to work in a fish department. Independent dealers are also aware of certain difficult conditions in their industry, and they can see how many of them can be alleviated by appropriate training.

The profit motive is of paramount concern. Better handling and selling practices mean more profits from seafood. When dealers perceive that training their employees is likely to improve their operations they readily connect this with increased profit. If a beginning can be made, further motivation is virtually assured.

The Coordinator

The key to a successful training program is the course coordinator. It is he who will contact and work with individual and group members of the industry. He forms the advisory committee and presides at its meetings. He brings to bear on the training problem the full facilities of distributive education and of the marketing representatives from the Bureau of Commercial Fisheries, U.S. Department of the Interior. The courses revolve around him, and he will be present at all course sessions. All the details of planning, organizing, conducting the courses, and utilizing resources are his responsibility.

The Advisory Committee

The advisory committee is invaluable in organizing a new program. Its advice and counsel help the coordinator determine the subject matter of the course and the qualified speakers who will be invited to participate. The advisory committee may also be used to help in promoting course attendance by having representatives from their companies attend and by influencing others to do so.

Very often it is the advisory committee that suggests the time, frequency, and place of class meetings. The public relations function of advisory committees is useful, too, especially as it shows the support of the industry for the course.

The course coordinator, with the help of sources in Distributive Education and from marketing representatives of the Bureau of Commercial Fisheries, will determine the size and composition of the advisory committee. Since the best contributions often come from those directly concerned with the particular program, membership should typically include representatives from the trade—owners, managers, buyers, training and personnel directors—as well as members from the coordinating groups, and personnel from DE and the Bureau of Commercial Fisheries.

The advisory committee may include other persons having certain relationships with the seafood industry. These may include, for example, representatives of governmental agencies having to do with food, fisheries, and education. Food editors, home economists, and utility company personnel may also be valuable resources.

One or two meetings of the committee usually suffice. The first meeting can be concerned with selection of course outline and speakers. Information may be gathered on the amount of enrollment participation of each of the organizations represented. Based on the recommendations of the committee, the course is planned and necessary publicity is prepared.

The second meeting may be used for considering the details of class meetings, making final arrangements, and furthering plans for promoting the course.

Enlisting Leaders

Enlisting the aid of industrial leaders is obviously a matter of importance. Men with leadership qualities are quicker to discern the value of training courses. When their involvement in and support of the training project is known, wider support tends to follow.

Organizing the Course

The coordinator, with the help of the Bureau of Commercial Fisheries and the advisory committee, must decide on the type of

offering (seminar, clinic, course, program, or some combination), the title, the time of day, season, and number of sessions.

These are some guidelines:

a. September or January are good starting times because they mark the beginning of new seasons.

b. Afternoon sessions are better for owners and managers who are usually too fatigued for evening sessions.

c. One-day seminars are best for chainstore people who cannot as well spare a few hours per day over a period of time.

d. Independents generally prefer 2-hour sessions over a period of time.

Financial Arrangements

Though financing training projects is always a consideration, courses offered under DE sponsorship are a part of the public education system and are not conducted as moneymaking ventures. Usually the regular DE or Public Law 1027 funds (vocational education in the fishery trades) allotted through each State to the local community are sufficient to cover the costs incurred in a program. A small fee does not discourage business people however, since they often have a greater respect for a course for which a fee is charged. Also, it is convenient to have a reserve fund available to meet certain current expenses while awaiting State and Federal funds. Accordingly, some training centers have experimented successfully with the use of an activity fee—usually from $3 to $5 per enrollee. This fee can be used to pay for facilities, luncheons, coffee breaks, and other incidental expenses of the program.

Personnel

Personnel costs usually include the salary of the coordinator, fees or honoraria for instructors, and travel and per diem allowances.

Coordinators, if chosen from DE ranks, either perform this work as part of their regular duties or they may be paid the rates customarily granted in that community for other instructors in adult extension work.

Speakers from industry usually are pleased to donate their services to further progress in their field. However, some speakers will require honoraria and the distances involved in traveling to the meetings may make travel expenses necessary. According to the custom in each community, these can be paid from Public Law 1027, DE, or activity funds, or from a combination of all.

Materials

The cost of materials for instructors and students is usually nominal. The greatest cost item in this category would be the seafood which is brought into class for cooking, cutting, filleting, and display practice demonstrations. The activity fund can be used for this purpose. However, cooperating merchants usually furnish these materials free of charge.

Bulletins and brochures are furnished by the Bureau of Commercial Fisheries, U.S. Department of the Interior. Outlines of texts of course lectures and other duplicated material are furnished by the local school district through DE auspices. Film and projector rentals and other instructional material costs should be considered in developing the program budget. Motion pictures and sound slide films are usually available from the Bureau of Commercial Fisheries or from cooperating merchants.

Promotion

Preparation and reproduction of brochures and letters, postage, and news media advertising, including newspapers, radio, and television, are items of promotional expense and these can be expensive. These costs can be met from the accepted sources: DE funds, Public Law 1027, activity funds, or a combination of all.

Other Expenses

General overhead, classroom rental, or allowances for heat and light may need to be included in the course budget.

If the training session is to be worth while, means for telling potentially interested persons about it ought to be widely used, such as company newsletters and house organs. Efforts by word-of-mouth, especially from members of the advisory committee and the coordinator, are helpful. Spot announcements on radio and televisions stations are especially effective.

Timing

Businesses work on strict time schedules, and it is imperative that stores and supporting facilities be adequately manned at all times. Owners and managers must schedule their key personnel carefully, so they should be informed about the proposed course in time to arrange schedules to permit employees to attend. A minimum of 4 weeks should be allowed between the first announcement and the starting date of the course.

Student Classifications and Requirements

In forming classes, limits should be set on size and representation A group of from 20 to 30 persons presents opportunities for good learning experience. Larger groups tend to become unwieldy, especially in discussion. If general groups, as from different chains, are to be represented, the members from each company should be predetermined.

It has been found that homogeneous groups representing one segment of the industry are usually much more effective than cross-sectional groups.

Teaching Approach

Although the lecture will be the basis for many sessions, the informal style which is so successful with adult groups should be encouraged. Conference and discussion methods should be used as much as possible. In the opening session, members should be introduced to one another; their types and years of experience should be related; and they should be made to feel that their contributions to class discussion are important.

The First Meeting

Much of the enthusiasm a course generates depends upon the success of the first meeting. Plans for capitalizing on the resources of the members of the group for each other should be carefully structured.

Here are some suggestions:

- ***Registration.*** Name tags should be furnished and an informal get-acquainted period should be provided. Exhibits and literature should be on view.
- ***Class period introductions.*** A word of welcome from someone well known in the industry, or from some related field, is a good beginning. This may be followed by an introduction of, or reference to, the members of the advisory committee, and the sponsors and others concerned with the planning and promotion of the course.

  After the coordinator tells something about himself and his "credentials," each student tells about himself and his experience. Adding the cumulative experience of the members of the group is one way of stressing the value of each student as a resource person.
- ***Motivation.*** Concrete statements about the course and specific reference to probable outcomes for students should be presented. For example:

  Purpose: To assist the personnel (of retail) organizations to sell more top-quality seafood as a result of increased knowledge of the fishing industry and its products.

  Scope: To present the most recent information available on the handling and merchandising of seafood, including such topics as quality, receiving and cutting, promotion, advertising, sales and display techniques, self-service vs. service operations, sanitation and storage, preparation, and cooking.
- ***Course Outline.*** Should be duplicated and distributed to students.

Teaching Methods

A definite attempt should be made to "change the pace" in presenting the course work, especially in cases of full-day or half-day seminars. These courses lend themselves to different teaching methods. The following methods can be effective:

- lecture
- demonstration
- questions and answers
- conference
- group discussion
- workshop
- role-playing
- panel discussion
- "cookerama"

The demonstration method can be used in teaching about cooking, cutting, and filleting of fish. Role-playing can be used in teaching the selling process. Lectures and panel discussions are valuable in bringing organized information to the group.

Theoretical subjects or projects and industry problems or objectives should be minimized since the men who attend these courses want something they can use in day-to-day operations. The demonstration method is especially useful because of its practicality and intrinsic interest. For example, cooking, preparation, and serving demonstrations include seafood product judging, cutting, wrapping and packing, "cookerama," and taste tests.

Evaluation

An evaluation of the educational program can be a helpful device for planning future courses. Questions answered may include:

1. How effectively was the work presented?
2. Did the course meet the needs of the people who attended?
3. Is there reason to continue the course?
4. Is there a demand for further or more advanced courses?
5. Are there recommendations for improvements to be incorporated in later courses?

The most frequently used means of evaluation is to have enrollees complete a questionnaire at the last session of the course. The scope of the evaluation depends on the types of information required by the coordinator and his advisory committee.

Another method of evaluation is to have a postcourse meeting of the advisory committee to discuss the matter. Another is to have selected members of the group meet with the coordinator for a short time after each session to evaluate the speakers, demonstrations, and other parts of the briefing later speakers in the course and even to assist the speakers to improve future presentations. The following suggestions were gathered from each evaluation proceedings:

1. Teach the men what they can use immediately. They are not as interested in history, background, and theory.

2. Use mimeographed background material to guide discussions.

3. Allow time for discussion of general problems of the group.

4. Do not discuss means or equipment not readily available to the group.

5. Stress and demonstrate the menu possibilities of seafood. Show how fish is cooked.

6. Have a "success story" told at each meeting. Have the person giving the "success story" answer any questions brought up by the group.

Followup

Since adult courses are a part of the nationwide program of continuing education they should not end with the offering of a single course. Those who have attended should have their appetities whetted for future training. Although much good may come from a single course, the continuation of the work through a carefully planned series will help the enrollee to cope with the demands of a competitive market.

It is strongly recommended that leaders in seafood training explore the possibility of courses leading to a diploma. In this manner a number of advanced courses, often depth studies of a single subject in the original course, can be operated. Interest can be guided through a series of courses, such as, supervision, special sales training, fish and meat merchandising, and comprehensive training for owners and managers.

SEAFOOD MERCHANDISING CLINIC [1]

EVALUATIVE QUESTIONNAIRE

Your position ____________________

1. Was this meeting of value to you in your operations? ____________________
2. Did you gain enough knowledge of seafood and seafood merchandising to improve your preparation in this area? ____________________
3. What topics were not covered that you would have liked to have had presented? ____________________
4. On what topics covered do you feel you would like more information? ____________________
5. Do you feel that any of these topics should be eliminated? If so, which ones? ____________________
6. Do you feel that this type of clinic should be repeated at regular intervals for other men in your organization? ____________________
7. Do you feel a program for apprentice fishmen of service and self-service should be developed and presented? ____________________

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[1] Course conducted by Nassau County, N.Y., for New York City merchants.

COURSE EVALUATION[2]

Your assistance is requested in the evaluation of the Retail Seafood Management course which you have just completed. Your ideas, when compiled with the evaluations from the other members of your group, will assist us in the improvement of future course programs and in planning an advanced course program for you and other graduates of the basic course.

1. How applicable was the course material to your business?
Generally useful in my business ________
Some useful information ________
Not applicable to my situation ________

2. Was the course length—
about right? ________
too short? ________
too long? ________

3. If you checked either "too short" or "too long" in question 2, what is your recommendation for future courses?
Number of meetings ________
Hours of instruction per meeting ________

4. Was the day of the week convenient on which the course met? Yes ________ No ________
If it was inconvenient, what day would you suggest? ________________

5. Was the starting hour convenient? Yes ________ No ________
If inconvenient, at what time should it begin? ________________

6. Please rate the subjects and speakers.
KEY: S—Superior, E—Excellent, G—Good, F—Fair, P—Poor

	Subject	***Rating***	***Speaker***	***Rating***
a.	**(session title)**	**S E G F P**	**(name of speaker)**	**S E G F P**
b.		**S E G F P**		**S E G F P**
c.		**S E G F P**		**S E G F P**
d.		**S E G F P**		**S E G F P**
e.		**S E G F P**		**S E G F P**
f.		**S E G F P**		**S E G F P**
g.		**S E G F P**		**S E G F P**
h.		**S E G F P**		**S E G F P**
i.		**S E G F P**		**S E G F P**
j.		**S E G F P**		**S E G F P**

7. What subjects not included in this course should be included in the next course?

8. Were any subjects inadequately covered? Please list.

9. What subjects, if any, should be eliminated from the next course?

10. What could be done to improve the program? (Meeting room facilities, course material, visual aids, etc.)

11. Have you been able to use information received in the course in your business? Yes ________ No ________

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[2] **Administrative Management Courses, Small Business Administration, Washington, D.C.**

12. Do you have plans for applying course information to your business? Yes ______ No ______
What and how?

13. Are you interested in attending a more detailed or advanced course? Yes ______ No ______
What subjects would you like to study in greater detail?

14. Do you believe the basic course should be offered again? Yes ______ No ______
Would you recommend it to your associates? Yes ______ No ______

15. May your name be used in promotion of future programs? Yes ______ No ______
Would you be willing to assist as a member of an advisory committee in planning a future course? Yes ______ No ______

16. Please list other businessmen who may be interested in a course program.

17. Please give any other comments or suggestions for improvement of the Retail Seafood Management.

Your signature (optional)________________ Date __________

CHAPTER III

Curriculums for Seafood Merchandising Training Courses

IN THIS AND THE FOLLOWING CHAPTER a variety of curriculum planning materials are presented for those who will have responsibility for organizing seafood merchandising training courses. It is intended that these materials will offer suggestions for adaptation by those whose responsibility includes devising the most profitable training experiences.

Chapter III presents nine outlines of scope and sequence for different kinds of training experiences directed at the needs and intrests of several different groups. In Chapter IV an outline of one course is offered both as a sample of detailed educational planning and as an example of subject matter that might, at least in part, be incorporated into any course of seminar offering.

1. Retail Seafood Business—Management and Supervisory Level Personnel

(Six sessions of 2½ hours each)

First Session:	*Teaching Techniques and Materials*
(1) Introduction to Seafood Merchandising Clinic.	Get acquainted. Distribute outline of course. Group discussion: What each student expects from course, how information can best be presented to fill individual needs, what can be accomplished.

(2) General Fisheries Information and Problems.	Lecture on local and national seafood industry and laws. Class divided into groups of five for consideration of specific merchandising problems. Film: "Fresh Out of the Water."

Second Session:

(3) Operating a Seafood Department.	Checklist of operations. Discussion of especially profitable operational procedures by students.
(4) Product Information.	Introduction to "Fresh and Frozen Fish Buying Manual." Presentation on inspection and standards. Charts and pictures of species. Industry literature on various species.

Third Session:

(5) Economics of Seafood Merchandising.	Discussion of comparative pricing, multiple unit packaging and pricing. Profit comparisons. Rate of turnover. Profit in relation to display and space. Seasonal mark-ups.

Fourth Session:

(6) Promotional Activities and Possibilities.	Lecture. Case study of local seafood advertising. Sample successful advertisements. Cooperative advertising, tie-in advertising and promotion, and product display association, use of point-of-sale material in frozen food cabinets, in-store distribution of recipe material, in-store demonstrations by producers, product position in self-service counters, preferences and recommendations to producers for package shape and weight.
(7) Trends in Seafood and Seafood Merchandising.	Lecture. Discussion of new processes and packaging exhibits. Current periodical literature.

Fifth Session:

(8) Supervisory Techniques.	Discussion. Basic needs of good supervision. Methods of training. Observing a seafood department. Correcting and counseling. Role-playing. Conference-style discussion of problems involving personnel.
(9) Government Services to Seafood Merchandising.	Guest speaker: Marketing Specialist, Bureau of Commercial Fisheries. Samples of Government literature. Copies of pertinent legislation, local, State, and Federal.
(10) Nutritional Values.	Charts of nutritional values. Demonstration by home economist. Luncheon, dinner, or snack. Taste test.
(11) Conclusion.	Review of course. Evaluation. Awarding of certificates.

2. Retail Seafood Business—Management and Supervisory Level Personnel

(1-day seminar)

Program

9:00 a.m.	Introduction to Seafood Merchandising Seafood Merchandising in the Greater Philadelphia Area
9:45 a.m.	Movie: "Fresh Out of the Water"
10:00 a.m.	Pricing and Profits
10:30 a.m.	Intermission
10:45 a.m.	Seafood Cookery Demonstration
12:15 p.m.	Lunch
1:00 p.m.	Product-Judging Session
2:15 p.m.	Role of the Federal Government in the Promotion of Seafoods
2:45 p.m.	Promotional Efforts by Seafood Departments
3:10 p.m.	Creative Ideas and Brainstorming Session
3:20 p.m.	Intermission
3:40 p.m.	Supervisory Techniques

4:00 p.m. Customer Relations and Suggestion Selling
4:55 p.m. Presentation of Certificates
5:00 p.m. Adjourn

3. Retail Seafood Business—Operational Level Personnel

(5 sessions of 2½ hours each)

First Session:	*Teaching Techniques and Materials*
(1) Introduction to Seafood Merchandising Clinic.	Get acquainted. Distribute outline of course. Group discussion: What each student expects from course, how information can best be presented to fill individual needs, what can be accomplished.
(2) General Fisheries Information and Problems.	Lecture on local and national seafood industry and laws. Divide into groups of five to discuss local sales problems. Film: "Fresh Out of the Water."
Second Session:	
(3) Principles of Salesmanship.	Lecture. Guest Speaker: a top salesman. Role-playing. Motion picture on salesmanship.
Third Session:	
(4) Product Information.	Introduction to "Fresh and Frozen Fish Buying Manual." Presentation on inspection and standards. Charts and pictures of species. Industry literature on various species.
(5) Government Services to Seafood Merchandising.	Guest Speaker: Marketing Specialist, Bureau of Commercial Fisheries Samples of Government literature. Copies of pertinent legislation, local, State, and Federal.
Fourth Session:	
(6) Operating a Seafood Department.	Checklist of operations. Discussion of especially profitable operational procedures by students.

(7) Principles of Salesmanship.	Sales demonstrations and discussion of techniques.
Fifth Session:	
(8) Nutritional Values.	Charts of nutritional values. Demonstration by home economist. Luncheon, dinner, or snack taste test.
(9) Conclusion.	Review of course. Evaluation. Awarding of certificates.

4. Retail Seafood Business—Operational Level Personnel

(1-day seminar)

A. Talks by experts in their specific fields.

Time	*Subject*
30 minutes	Price and profits.
30 minutes	Display cabinet care and product rotation.
30 minutes	Advertising: in-store, tie-in displays, new ideas and modern approach, use of color, and impulse buying.
30 minutes	Consumer information: recipes, general information on local species. (In conjunction with this subject, 5 or 6 seafood dishes should be prepared.)

B. Intermission (Samples of seafood dishes served).

C. Talks and panel.

30 minutes	Salesmanship. Principles of salesmanship applied to retail selling.
30 minutes	Panel of speakers open to questions from floor.
15 minutes	Concluding summary by moderator.

5. Retail Seafood Business—Operational Level Personnel

(1-day seminar)

Program

9:00 a.m.	Introduction to Seafood Merchandising Seafood Merchandising in the Greater Philadelphia Area

OCEAN-FRESH
SEAFOOD
FISH N SEAFOOD PARADE
FRESHER-BY-FAR!

An attractive seafood display

9:45 a.m.	Movie: "Fresh Out of the Water"
10:00 a.m.	Merchandising for Better Profits
10:30 a.m.	Cleanliness and Sanitation
11:00 a.m.	Intermission
11:15 a.m.	Seafood Cookery Demonstration
12:15 p.m.	Lunch
1:00 p.m.	Product-Judging Session
2:15 p.m.	Maintaining Freshness (Rotation, Receiving, Storage)
2:35 p.m.	The Seafood Department Manager Looks at His Case
2:55 p.m.	Intermission
3:10 p.m.	Movie: "Retailing Fish"

3:25 p.m.	Role of the Federal Government in the Promotion of Seafoods
4:00 p.m.	Customer Relations and Suggestion Selling
4:45 p.m.	Summary and Discussion
4:55 p.m.	Presentation of Certificates
5:00 p.m.	Adjourn

6. Retail Seafood Business—Wholesaling

(10 sessions of 2½ hours each)

First Session:	*Teaching Techniques and Materials*
(1) Introduction to Seafood Merchandising Clinic.	Get acquainted. Distribute outline of course. Group discussion: What each student expects from course, how information can best be presented to fill individual needs, what can be accomplished.
(2) General Fisheries Information and Problems.	Divide into groups of 5 for a discussion of wholesaling problems.
Second Session:	
(3) Economics of Seafood Wholesaling.	Lecture: Outstanding merchant or college speaker. Profitmaking. Credit. Uniform credit regulations. Delivery costs.
Third Session:	
(4) Economics of Seafood Wholesaling.	Discussion. Central tray packaging. Relationship between wholesaler and retailer. Helping the retailer solve selling problems; "specials," customer traffic, shelf space. Cooperative advertising.
(5) Government Service.	Guest speaker: Marketing Specialist, Bureau of Commercial Fisheries. Samples of Government literature. Copies of pertinent legislation, local, State and Federal.

Fourth Session:

(6) Product Information.	Lecture. Case study of local seafood advertising. Pictures and statistics on "before and after" displays. Sample successful advertisements. Brainstorming session on creative promotional ideas.
(7) Promotional Activities and Possibilities.	Discussion: Assisting the customers. Cooperative advertising, tie-in advertising and promotion. Product display association. Point-of-sale material in freezer food cabinets. Product positions.

Fifth Session:

(8) Nutritional Values.	Demonstration by home economist. Charts of nutritional values. Luncheon, dinner, or snack. Taste test.

Sixth Session:

(9) Trends in Seafood and Seafood Merchandising.	Lecture. Discussion of new processes and packaging exhibits. Current periodical literature.
(10) Conclusion.	Review of course. Evaluation. Awarding of certificates.

7. Retail Seafood Business—Wholesaling

(1-day seminar)

Time:

30 minutes----------	Introduction: General fisheries information and problems.
60 minutes----------	Economics of seafood wholesaling, panel or lecture by leading local merchants.
60 minutes----------	Nutritional value and seafood cooking or testing demonstration.

Intermission:

60 minutes	Panel discussion.
60 minutes	Promotional activities.

8. Consumer Educators

Home economists, students, women's feature editors, teachers, utility company representatives, consumers

(4 sessions of 2½ hours each)

First Session:	*Teaching Techniques and Materials*
(1) Introduction to Seafood Merchandising Clinic.	Distribute outline of course. Group discussion: What each student expects from course, how information can best be presented to fill individual needs.
(2) General Fisheries Information.	Lecture. Field trip: Wholesale market, dock, etc. Literature on local, State, and national seafood industry and laws. Film: "Fresh Out of the Water."
Second Session:	
(3) Product Information.	Lecture. Charts and pictures of species. Industry literature on various species. Government manuals: "Fresh and Frozen Fish Buying Manual," etc. Product-judging test. U.S. Department of the Interior "Standards" booklets.
(4) Government Service to Seafood Merchandising.	Guest Speaker: Marketing Specialist, Bureau of Commercial Fisheries. Samples of Government literature. Copies of pertinent legislation, local, State and Federal.
Third Session:	
(5) Nutritional Values, Preparation, and Cooking of Seafood.	Charts of nutritional values. Demonstration by home economist. Taste test. Luncheon, dinner, or snack.

Fourth Session:

(6) Trends in Seafood and Seafood Merchandising.	Lecture. Demonstration of new processes and packaging exhibits.
(7) Conclusion.	Review of course. Evaluation. Awarding of certificates.

9. Mass Feeders

Restaurants, hotels, institutions, military, Government

(5 sessions of 2 hours each)

First Session:	*Teaching Techniques and Materials*
(1) Introduction to Seafood Clinic.	Distribute outline of course. Group discussion: What each student can expect from course, how information can best be presented to fill individual needs.
(2) General Fisheries Information.	Lecture. Field trip: Wholesale market, dock, etc. Literature on local, State, and national seafood industry and laws. Film: "Fresh Out of the Water."
(3) Principles of Menu Planning with Seafood.	
a. Why fish is a good meat to serve often.	Charts on nutritional values and profit potential.
b. Menu planning principles applied to fish.	Materials on menu principles.
c. Developing and using a menu scorecard.	Exhibit of prepared fish dinner to be scored.
Second Session:	
(4) Buying Seafood for Profit.	Lecture. Guest speaker: Wholesaler or seafood dealer.
a. Kinds and forms of seafood available.	Exhibits of fish and pictures of market forms.
b. Purchasing for profit.	

c. Pricing meals.	
d. Becoming acquainted with "new" fish.	
Third Session:	
(5) Grading and Inspecting Seafood.	Guest speaker: Marketing Specialist, Bureau of Commercial Fisheries.
a. Grading of seafood.	Distribute copies of inspection standards.
b. Sanitary inspection of seafood.	Film: "Fisheries Products Standards."
c. Qualities of fresh fish.	Film: "Retailing Fish."
d. Care of seafood in restaurants.	
Fourth Session:	
(6) Preparation of Seafood Dishes.	Demonstration.
a. Preparing casseroles of seafood.	
b. Preparing fish fillets.	
c. Garnishes for seafood.	Sample products made in demonstration.
d. Sauces for seafood.	
Fifth Session:	
(7) Preparation of seafood dishes.	Cookerama.
a. Use of seafood in salads.	Exhibit and sampling.
b. Use of seafood in soups.	Test Kitchen Series Booklets Nos. 1 to 13.
c. Use of seafood in appetizers.	Bureau of Commercial Fisheries.
d. Salads that go well with fish.	Film: "Shrimp Tips from New Orleans" and booklet on film.
(8) Conclusion.	Review of course. Evaluation. Awarding of certificates.

CHAPTER IV

A Sample Seafood Merchandising Course

AS A FURTHER AID to planning training programs in seafood merchandising, outlines of 11 topics likely to be most used are presented in some detail. The topical treatments in the outline are not prescriptive, for it is intended that they should be adapted to suit the needs of the particular training session. They are, in fact, intended to help with the organization of subject matter and the use of a wide variety of teaching methods, although no attempt is made to delineate them in this section.

Topical Outlines—A Seafood Merchandising Course

1. Introduction
    a. Importance of training in seafood merchandising
    b. Purpose of training
2. General fisheries information
    a. Size and scope of the fishing and seafood industry
    b. Production operations
    c. Factors in the distribution of seafood
    d. Present status of the industry in the local area
3. Product information
    a. Major species of edible seafood
    b. Market forms of seafood
    c. Classification of species of seafood
    d. Tests for freshness
    e. Quality standards for seafood
4. Promotional activities for the seafood industry and seafood department
    a. Promotional opportunities

- b. Principles of seafood advertising
- c. In-store merchandising and display
- d. Fundamentals of seafood display

5. Principles of salesmanship for the seafood department
    - a. Dress and deportment
    - b. Approach
    - c. Determining the customer's needs
    - d. Presentation of merchandise
    - e. Customer services

6. Operating a seafood business
    - a. Buying and ordering
    - b. Receiving and storing
    - c. Cutting operations for fresh fish
    - d. Physical facilities of the department
    - e. Selling operations
    - f. Care of frozen seafood

7. Supervisory techniques
    - a. What is a supervisor?
    - b. Basic needs of good supervision
    - c. Methods of training
    - d. Observing a seafood department
    - e. Correcting and counseling

8. Economics of seafood merchandising
    - a. Pricing and profits
    - b. Service vs. self-service seafood operation

9. Nutritional value, preparation, and cooking of seafood
    - a. Nutritional value
    - b. Preparation of seafood
    - c. Demonstration

10. Trends in seafood and seafood merchandising
    - a. Changes in consumer preference
    - b. Latest products and methods

11. Government role in seafood merchandising
    - a. Legislation and agencies affecting the seafood industry
    - b. Meeting foreign competition as a Government responsibility
    - c. The Bureau of Commercial Fisheries, U.S. Department of the Interior
    - d. Research activities of governmental agencies

The detailed elaboration of the outline follows and the numbering code is keyed to the outline.

1. Introduction

Importance of training in seafood merchandising.—Legislation, in the form of the Saltonstall-Kennedy Act of 1954, has combined the training efforts of distributive education and the Bureau of Commercial Fisheries personnel on the Federal, State, and local levels.

In 1954, Public Law 466, popularly known as the Saltonstall-Kennedy Act, was enacted by Congress. Under this Act an amount equal to 30 percent of the gross receipts from duties collected under the customs laws on fishery products for each fiscal year becomes available to the Department of the Interior. These funds are disbursed to the Bureau of Commercial Fisheries for research and services activities. The basic objectives of the Bureau's marketing program are to: (1) promote the free flow of domestically produced fishery products; (2) develop and increase markets for fishery products of domestic origin; and (3) promote the improvement of mareting practices.

DE aims at promoting high standards of operation in the distribution of goods, such as fishery products, through the improvement of marketing and merchandising practices throughout the field. These merchandising practices can be improved through the development of balanced, comprehensive training programs as specific aids to owners and managers in the efficient conduct of their business operations, as assistance to persons already in distributive occupations in the seafood industry, and as preparation of employees to take advantage of opportunities for advancement.

Purpose of training.—The purpose of this course is not to make fishermen out of the members of the training group; but to show the potential of the seafood department and to present some basic technical facts. Every product must be merchandised, and DE is most concerned with this aspect of the industry.

An aim of this course is to assist in developing a program for the seafood industry similar to that of the Department of Agriculture's clinics for fruits and vegetables. The agriculture clinics have been effective in increasing the efficiency of produce department operations of management, supervisory, and sales personnel.

2. General Fisheries Information

a. Size and importance of the fishing and seafood industry
  (1) Employs more than a half million workers, including persons employed in allied industries.

(2) The fishing occupations has a long history.

(3) The term "seafood" refers to both fish and shellfish.

(4) Main producing areas of seafood in the United States and their principal edible catches in 1962 were:

Producing area	*Principal edible catches*
New England (Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut).	Sea herring, ocean perch, northern lobster, haddock, whiting, flounders, scup or porgy.
Middle Atlantic (New York, New Jersey, Delaware).	Scup or porgy, clams, flounders.
Chesapeake (Maryland, Virginia).	Blue crabs, oysters, clams, scup or porgy.
South Atlantic (North Carolina, South Carolina, Georgia, east coast Florida).	Shrimp, blue crabs, spot, catfish, and bullheads.
Gulf (west coast Florida, Alabama, Mississippi, Louisiana, Texas).	Shrimp, mullet, crabs, red snapper, oysters.
Pacific (Alaska, Washington, Oregon, California).	Salmon, halibut, flounders, oysters, king crabs, Dungeness crabs, rockfish, tuna, jack and Pacific mackerel, sardines.
Hawaii	Tuna.
Great Lakes (fresh-water fish).	Yellow perch, white bass, sheepshead, carp, lake herring, chubs, smelt, tullibee.
Mississippi River (fresh-water fish).	Catfish, buffalofish, carp, sheepshead, bullheads.

(5) Variations in catch from year to year are due to changes in natural abundance, demand for fish, and fishing methods.

(6) Annual catch statistics (1962).

- (a) World catch: 98.6 billion pounds of fish.
- (b) U.S. catch: 5.2 billion pounds (excluding weight of mollusk shells).
  - (i) The U.S. catch is in fifth place among nations of the world. (Japan, Peru, China mainland, and U.S.S.R.)
  - (ii) More than 200 species are caught in the United States with a value to the fishermen of $397 million.

(7) Production Operations.

- (*1*) A typical trip at sea.
  - (a) The fishing vessel is a 110-foot steel otter trawler.
  - (b) The crew is made up of approximately 15 experienced men.
  - (c) They journey up to 150 miles off the U.S. coast for fish or shellfish.
  - (d) The net is put overboard.
  - (e) The hold is lined with 8 to 10 inches of crushed ice.
  - (f) The fish are taken aboard in the net; the fish are cut open, gutted, washed, and allowed to drain.

(g) They are then stored in the iced hold.

(h) Alternate layers of ice and fish are carefully placed in separate pens to safeguard good quality.

(i) An average trip of about a week to 10 days yields about 130,000 pounds of fish.

(2) How seafood is caught. (1962)

Type of gear	*Percent of total catch*	*Principal edible species*
Purse seines	57	Mackerel, Pacific salmon, sea herring, tuna.
Otter trawls	20	Crabs, groundfish, shrimp.
Hooks and baits	5	Catfish, crabs, halibut, tuna.
Gill nets	5	Lake fish, mullet, salmon, sea bass.
Pots and traps	4	Crabs, crawfish, eels, lobster, mullet, sea bass.
Pound nets and traps	2	Alewives, salmon.
Dredges	2	Clams, crabs, oysters.
Stop nets and seines	2	Carp, croaker, mullet.
Haul seines	1	Sea herring.
Other	2	

(3) Regulations on production and processing. (See specific State and local laws relating to fish and shellfish.)

b. Factors in the distribution of seafood

(1) Selling the catch

(a) In coastal fishing towns, marketing, handling, and processing of seafood is usually based at the local fish pier, dock, or wharf.

(b) The pier provides docking facilities for the local fishing fleet.

(c) Typically, the town's wholesale seafood dealers also maintain places of business on the pier.

(d) The pier usually has a central building where each day's catch by the individual fisherman is sold to the dealers or directly to processors.

(e) The sale may be in the form of an auction conducted by a commission agent on an offer and acceptance basis.

(f) In some areas, the fish processor owns the fishing craft and the men who operate the gear are paid a fixed monthly or daily wage.

(g) On other fishing grounds, the processor supplies the equipment, contracting to purchase the catch on a poundage basis.

(h) In other instances, the fishermen may own boats and gear, selling the catch to the processing plant operator according to a scale of prices previously arranged by contact.

(2) The wholesale market

(a) Large coastal and noncoastal cities have wholesale seafood markets.

(b) Although seafood markets were traditionally located near some dock facilities, emphasis is now placed on convenience for rail and truck loading and accessibility to highways and turnpikes.

(c) Cooling and freezing facilities are available for each dealer, often in addition to common cold-storage warehouse space.

(d) The wholesalers sell to retailers, restaurants, hotels, institutions, and chain food stores, as well as to other specialized wholesalers.

(e) Some processing of seafood is done right at the wholesale market, such as shucking of oysters and clams, filleting, etc.
(f) Some wholesalers also act as importers.

(3) Transportation of fishery products
(a) Noncoastal or inland cities rarely maintain centralized wholesale seafood markets.
(b) Seafood is delivered on order from production or processing areas.
(c) Trucking is the most efficient method of transporting highly perishable seafood because of advantages in speed and time, controlled temperature, and handling ease in loading and unloading.
(d) Refrigerated railway cars are also used for transportation of seafood to the seafood industry.
(e) Airlines offer air express and airfreight services.

(4) Processing seafood
(a) Both fully mechanized and semi-mechanized plants are in operation for processing seafood.
(b) Processing operations: Washing and scaling, filleting, freezing, or boxing of fillets for immediate sale as fresh fish, and fillet, steak, and fish stick cooking before freezing.

(5) Operations involved in canning seafood
(a) Obtaining the raw materials
(b) Transporting and receiving
(c) Grading
(d) Dressing and washing
(e) Preparing for the can
(f) Filling
(g) Exhaust or vacuum and sealing
(h) Processing, cooking, or sterilizing
(i) Cooling and washing
(j) Coding
(k) Warehousing
(l) Labeling

(6) Retailing seafood
(a) Chain supermarkets
(b) Cooperatives
(c) Independent retail grocers
(d) Specialty seafood stores
(e) Mass feeders: restaurants, schools, institutions, Government agencies, the military.

c. Present status of the fishing and seafood industry in the local area

This section includes an analysis of the strengths and weaknesses of the local seafood merchandising situation and of the industry at large. Here the instructor might objectively report the results of any survey that he undertook to determine the original need for the course. Questions that might be answered, perhaps by a representative panel of seafood experts, include:

(1) Is this area an inland or coastal market?
(2) What are the sources of the area's supply of seafood?
(3) What is the approximate per capita consumption of seafood in this area, compared to the national average? Has it changed any in recent years? Why?

(4) What channels of seafood distribution are represented in this area?

(5) What are the strengths and weaknesses of the various channels in this area?

(6) What is new or old in the seafood industry in this area?

3. Product Information

a. United States catch of certain species, 1962

Species:	*Landed weight (in thousands of pounds), 1962*
Buffalofish	18,500
Carp	30,300
Catfish and Bullheads	37,600
Clams	54,200
Cod:	
Atlantic	47,000
Pacific	3,200
Crabs:	
Blue	155,200
Dungeness	23,400
King	52,800
Flounders	155,300
Haddock	134,300
Halibut	53,800
Herring:	
Atlantic	158,600
Lake	10,100
Pacific	41,600
Industrial Fish	216,900
Lobsters: Northern	29,500
Mackerel:	
Pacific	48,600
Jack	90,400
Spanish	9,600
Menhaden	2,346,300
Mullet	43,200
Ocean Perch:	
Atlantic	124,000
Pacific	17,300
Oysters	56,000
Pollock	16,300
Red Snapper	12,500
Salmon	314,600
Sardines: Pacific	15,400
Scallops	24,600
Scup or Porgy	46.300

Shrimp	191,100
Tuna	312,200
Whiting	105,100
Yellow Perch	12,500
Total	5,008,300
All other species	344,700
Grand total	5,353,000

b. Market forms of seafood

(1) Preservation methods and forms.

(a) Terminology
- (i) Fresh
- (ii) Frozen
- (iii) Further processed (processed, prepared, or preserved, are words often used interchangeably)

(b) Glossary of seafood terms:

beheaded
breaded
cakes
canned
chemical additive
cooked
corned
croquettes
dehydrated
deviled
dinners
dried (freeze-dried)
fermented
filleted
fresh
frozen
gutted
hermetically sealed in containers
irradiated
juice or broth (clams)
kippered
live
meal
meat
offal (inedible portion of fish)
oil
pickled
portions
round (in-the-round)
salted
shelled or in the shell
smoked
soups (chowders)
spiced
steaks
stew
sticks

(2) Cuts of fish (descriptions and diagrams).

(a) Whole or round fish
(b) Drawn fish
(c) Dressed fish
(d) Steaks
(e) Fillets
(f) Butterfly fillets
(g) Sticks
(h) Portions

(3) Forms of shellfish (diagrams and pictures).

(a) In shell
(b) Shucked
(c) Headless
(d) Cooked meat

c. Classification of species of seafood (113 species frequently eaten)

(1) Common name
(2) Other common names
(3) Scientific name
(4) Method of catch

- (5) Place of catch
- (6) Age when received by retail markets
- (7) Season when available in markets
- (8) Description
  - (a) Usual market size in pounds
  - (b) Usual market form
  - (c) Color and characteristics

d. Tests for freshness, as part of quality control

- (1) Fresh fish
  - (a) Firm flesh
  - (b) Fresh, mild odor
  - (c) Clear eyes
  - (d) Red gills
  - (e) Shiny skin
  - (f) Stiff body
  - (g) Moisture and vapor-proof wrapping material
- (2) Frozen fish
  - (a) Solidly frozen
  - (b) Firm flesh
  - (c) No odor
  - (d) Moisture and vapor-proof wrapping material
  - (e) Glaze of ice on whole fish, if not wrapped
- (3) Seafood
  - (a) Shrimp
    - (i) Mild odor
    - (ii) Firm meat
  - (b) Clams and oysters
    - (i) In the shell, they should be alive
    - (ii) Shells should close tightly when tapped gently.
    - (iii) Shucked oysters should be plump and have a natural creamy color with clear liquid.
  - (c) Crabs and lobsters
    - (i) When bought live, they should show movement of the legs.
    - (ii) Spiny-lobster or rock-lobster tails, when frozen, should have meat of clear, whitish color.
    - (iii) Crabs and lobsters, when cooked, should be bright red and should have no disagreeable odor.
  - (d) Scallops
    - (i) They should have a sweetish odor.
    - (ii) When bought in packages, they should be virtually free of liquid.

e. Quality standards for seafood

- (1) Definition of quality
- (2) Buying quality products
- (3) Knowing the product
- (4) United States grade standards
  - (a) Standardization
    - (i) Helps to stabilize production
    - (ii) Simplifies processing
    - (iii) Promotes orderly marketing and efficient trading
    - (iv) Assures the consumer of products that are of a certain quality type and condition
    - (v) Usually helps to save money for all concerned
    - (vi) Results in the production of more uniform quality products

- (b) Grades in a standard are considered as the positions of the product in any scale based on certain inherent and physical characteristics
- (c) United States Department of the Interior Regulations governing processed fishery products
  - (1) Rules governing the conduct of a voluntary inspection service which includes the application of grade standards for fishery products.
- (d) United States Department of the Interior Grade Standard, published (1958-63)
  - (i) Frozen raw breaded shrimp
  - (ii) Frozen fried fish sticks
  - (iii) Frozen halibut steaks
  - (iv) Frozen haddock fillets
  - (v) Frozen cod fillets
  - (vi) Frozen raw breaded fish portions
  - (vii) Frozen salmon steaks
  - (viii) Frozen raw headless shrimp
  - (ix) Frozen ocean perch fillets
  - (x) Frozen fried scallops
  - (xi) Frozen sole and flounder fillets
  - (xii) Frozen fish blocks
  - (xiii) Frozen raw breaded fish sticks
  - (xiv) Frozen fried fish portions

4. Promotional Activities for the Seafood Industry and Seafood Department

a. Promotional opportunities

(1) Seasonal promotions

Fridays and other fast days observed by religious groups

(2) Themes created by seafood industry and the Bureau of Commercial Fisheries

- (a) "Summertime is Outdoor Fish Barbecue Time"
- (b) "August is Sandwich Month"
- (c) "September—Better Meals Build Better Families"
- (d) "October—National Fish'n Seafood Parade Month"
  - (i) Supported by all segments of the seafood industry, producer to retailer
  - (ii) Coordinated promotion, display material, and contests are publicized

(3) Tie-in promotions with other segments of the food industry

- (a) Ripe Olive Advisory Board
- (b) Sunkist Lemon Growers
- (c) Wine Advisory Board of California
- (d) Wheat Growers of America

- (4) Seafood industry groups which sponsor promotional activities
    - **(a) Bureau of Commercial Fisheries**
    - **(b) National Fisheries Institute (National Fish'n Seafood Parade)**
    - **(c) Specialized groups**
        - **(i) Shrimp Association of the Americas**
        - **(ii) Halibut Association of America**
        - **(iii) Canned Salmon Institute**
        - **(iv) Maine Sardine Council**
        - **(v) South African Rock Lobster Association**
        - **(vi) New Bedford Seafood Council**
        - **(vii) Mountain Trout Association of United States**
        - **(viii) Others**
- (5) Trade magazines
    - **(a) *Seafood Merchandising***
    - **(b) *Commercial Fisheries Review***
    - **(c) *Pacific Fisherman***
    - **(d) Frozen food magazines**
    - **(e) Volume feeding trade publications**
    - **(f) Food publications**
- (6) Other promotional agents
    - **(a) National retail food chains**
    - **(b) Seafood processors as individuals**
- (7) Types of promotional materials in use
    - **(a) Cooperative advertising layouts and materials from seafood processors**
    - **(b) Point of purchase materials**
    - **(c) Tie-in banners**
    - **(d) Brochures on various species and their preparation**
    - **(e) Photographs of fish dishes**
    - **(f) Recipes for newspapers and magazines or for counter giveaways**
    - **(g) Articles on how to increase profits through greater use of fish and seafood**
    - **(h) Articles on nutritional value and economy of seafood**
    - **(i) Cooking, serving, and preparation demonstrations**
    - **(j) Radio and television scripts and spot announcements**
    - **(k) Calendars featuring seafood pictures and recipes**
    - **(l) Material supplied to cookbooks, house organs, and other special-interest groups**
    - **(m) Advertising and counter displays tied in with editorial content of food page in local newspapers**

b. Principles of seafood advertising

Advertising should—

- (1) Get beyond featured items to sell an image of the Seafood Department.
- (2) Create interest by the use of descriptive adjectives, tied-in menus, and reference to institutional advertising on seafood and editorial section of the food page.
- (3) Be helpful and instructive; i.e., tell how to prepare seafoods in a simple manner.
- (4) Make pricing count in building the seafood image. Rather than selling cheapness, advertising should sell value.

Cholesterol Content of Some Protein Foods [1]

Food	Portion size	Cholesterol content
	Ounces	*Grams* [2]
Fish:		
Bluefish	4	0.07
Cod	4	.06
Croaker	4	.07
Flounder	4	.072
Haddock	4	.077
Halibut	4	.072
Herring, smoked	4	.07
Lobster, canned	⅓ cup	.104
Mackerel, Atlantic	4	.096
Salmon, Pacific	4	.11
Salmon, canned	3	.11
Sardines (Atlantic), canned in oil, drained	3	.085
Shrimp, dry-pack, drained	3	.18
Swordfish	4	.07
Tuna, canned in oil, drained	3	.063
Cheese:		
Roquefort	1	.027
Cheddar	4	.032
Edam	4	.018
Swiss	4	.043
Cream	4	.036
Cottage (skim-milk)	4	.002
Eggs:		
Whole	Medium egg (54 g.)	.30
White		.00
Yolk		.30
Beef:		
Hamburger	4	.14
Round steak	4	.15
Rib roast	4	.352
Liver	4	.12
Pork:		
Bacon	1 strip (8 g.)	.008
Ham	4	.07
Chop	3	.11
Frankfurter	3.5	.07
Veal:		
Cutlet	4	.075
Shoulder roast	4	.11
Leg roast	4	.168

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[1] Data obtained from U.S.D.A. handbook No. 8, *Composition of Foods*, p. 92–147.

[2] 28.3 g. equals 1 oz.

Cholesterol Content of Some Protein Foods [1]—*Continued*

Food	Portion size	Cholesterol content
	Ounces	*Grams* [2]
Chicken:		
Canned	4	.085
Fryers:		
Breast	4	.085
Leg	4	.08
Milk:		
Whole	1 cup	.033
Nonfat	1 cup	.001

(5) Tell of the nutritive value of seafood as being low in cholesterol, as food high in protein, and, for the most part, low in calories.

(6) Reflect the store's wide aisles and cleanliness. The newspaper advertisement should be orderly, easy to read, and easy to shop.

(7) Ask for the order. Image advertising can and should ask the customer to buy a guaranteed seafood program and should build confidence in the product and merchandiser.

c. In-store merchandising and display

(1) Objectives of point-of-purchase displays

- (a) To trigger postponed purchases by converting housewives' wants into sales.
- (b) To trigger shoppers to indulge in a treat for themselves or their families.
- (c) To trigger the need to buy something for the family.
- (d) To increase retail sales by breaking rigid intent pattern of shopping. (It is not easy to cause the customer to deviate.)
- (e) To create the idea of price specials. (The customer feels she cannot afford to pass up a bargain.)

d. Fundamentals of seafood display

(1) *Care.* Ice cabinets and display cases must be spotlessly cleaned before display is built.

(2) *Temperature.* The ideal temperature for the storage and display of fresh fish is between 31° and 32° Fahrenheit. Frozen fish must be kept at 0° F.

(3) *Lighting.* Avoid fluorescent lights that tend to give the white flesh of fish a yellow appearance.

(4) *Sanitation.* Cleanliness is necessary for quality control; contamination of seafood by bacteria can result from unsanitary facilities or tools.

Composition of Some Protein Foods

Food	State	Portion	Food energy	Protein	Oil
		Ounces	*Calories*	*(Grams)*	*(Grams)*
Bacon, Canadian	Raw	4	262	25	17
Beef:					
Hamburger	Raw	3	316	19	26
Porterhouse	Boneless	3	293	20	23
Round	do	3	197	23	11
Rib roast	do	3	266	20	20
Roast	Canned	3	189	21	11
Bluefish	Baked	4	193	34	5
	Fried	5.3	307	34	15
Cheese:					
Cheddar		1	113	7	9
Cottage		1	27	6	.1
Cream		1	106	2.6	10.5
Chicken:					
Broiler	Raw, boneless	8	332	44	16
Roaster	do	4	227	23	14
Fryer: breast	do	8	210	47	1
leg	do	5	159	29	4
Clams	Raw, canned	4	92	14.5	1.6
	Canned	3	44	6.7	0.9
Cod	Raw	4	84	18.7	0.5
	Dried	1	104	23.2	0.8
Eggs	Raw or cooked	1 medium	77	6	5.5
Flounder	Raw	4	78	17	0.6
Haddock	Fried	4	166	22.5	6.3
Halibut	Broiled	4	207	29.8	9
Pork	Raw	3	100	14.4	4.1
Herring:					
Atlantic	Raw	4	217	20.8	14.2
Pacific	do	4	106	18.8	2.9
Lamb:					
Chop	Cooked, boneless	3	356	20	30
Leg	Roasted, boneless	3	230	20	16
Mackerel:					
Atlantic	Canned	3	155	16.4	9.4
Pacific	do	3	153	17.9	8.5
Milk, whole	Raw	3	231	11.9	13.3
Oysters, meats	do	3	71.7	6.6	1.7
Peanuts	Roasted	1 cup	805	38.7	63.6
Peas	Green	1 cup	111	7.8	0.6
Pork:					
Ham	Cooked, boneless	3	339	20	28
Loin	Raw, boneless	3	284	20	22

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[1] Data obtained from U.S.D.A. handbook No. 8, *Composition of Foods,* p. 92–147.

Composition of Some Protein Foods—*Continued*

Food	State	Portion	Food energy	Protein	Oil
		Ounces	*Calories*	*(Grams)*	*(Grams)*
Salmon	Broiled	1 steak	204	33.6	6.7
King	Canned	3	173	16.8	11.2
Chum	do	3	118	18.3	4.4
Silver	do	3	140	17.9	7.1
Pink	do	3	122	17.4	5.3
Red	do	3	147	17.2	8.2
Sardines, Atlantic	Canned in oil	3	288	17.9	23
Pilchards, Pacific	Canned, natural	3	171	15.1	11.5
	Canned, tom. sauce	3	184	15.1	12.6
Sausage, bologna		4	252	16.8	18.0
Frankfurter	Cooked	4	283	16.0	23.0
Scallops	Raw	4	89	16.8	0.1
Shad	do	4	191	21.2	11.1
Shrimp	Canned, drained	3	108	22.8	1.2
Swordfish	Broiled	1 steak	223	34.2	8.5
Tuna	Canned, oil dr'd	3	169	24.7	7.0
	Canned, not dr'd	3	247	20.2	17.8
Veal:					
Cutlet	Cooked, boneless	3	184	24	9
Roast	do	3	193	24	10

(5) *Prepackaging.* The package should be adapted to the type of fish or seafood being handled, not the fish to the package.

(6) *Garnishing.* The addition of a slice of lemon, a sprig of parsley, or a dash of paprika can add color contrast and brighten a display of fresh fish on ice or in a self-service see-through package.

(7) *Use of ice.* Sprinkle ice lightly on top and around fresh fish on display to bring out the color and freshness.

(8) *Identification.* Tag each item with the correct descriptive tag and price.

(9) *Promotion of impulse buying and use of color.* Special display of regular or advertised merchandise promotes impulse buying.

(10) *Tie-in displays.* Posters, back-wall signs, and recipes should call attention to featured and related items.

5. Principles of Salesmanship for the Seafood Department

a. Dress and deportment
   (1) Cleanliness of person

- (2) Neatness of person
- (3) Uniformed personnel
- (4) Politeness and courtesy

b. Approach
- (1) Recognize a customer's presence promptly
- (2) Show a sincere, friendly interest in the customer
- (3) Be enthusiastic about seafood

c. Determining the customer's needs
- (1) When a customer knows what she wants, listen
- (2) Question the customer to learn her needs
- (3) Make a statement concerning the features of possible items

d. Presentation of merchandise
- (1) Know the product
  - (a) Prices
  - (b) Advertised or featured items
  - (c) Information on local species
- (2) Advise the customer about
  - (a) Recognizing her own needs and preferences
  - (b) Purchasing for quality and quantity
  - (c) Handling of fresh, frozen, prepared seafood
  - (d) General cooking methods
  - (e) Simple recipes and menu suggestions
  - (f) Nutritional value and economy of seafood
- (3) Suggest related items, such as salads, sauces, other forms of seafood.
- (4) Handle objections based on knowledge of your product.

e. Customer services
- (1) Weighing and pricing carefully
- (2) Wrapping for immediate use or for customer's freezer
- (3) Inviting reorder or mentioning next week's special
- (4) Handling complaints

6. Operating a Seafood Business

a. Buying and ordering
- (1) Pick your supplier carefully
- (2) Arrange for frequent deliveries
- (3) Order only enough fresh fish for 2 to 3 days
- (4) Be sure of adequate refrigeration of the product in transit
- (5) Know how to determine the quality and freshness of the fish upon arrival at your store
- (6) Plan your purchases, taking into consideration
  - (a) Designated fish days and special holidays
  - (b) Advertised items
  - (c) Day of week order is received

- (7) Rotate stocks of seafood regularly: "first in, first out"

b. Receiving and storing fresh fish
- (1) Shipments of fresh fish should be examined immediately upon arrival
  - (a) For size, quality, and body damage
  - (b) To check with records of quantities, prices, etc.
- (2) Ice is the best preservative for fresh fish
  - (a) It holds the required temperature
  - (b) It keeps the surface of the fish moist and in good condition
  - (c) It maintains minimum loss of weight and shrinkage
- (3) What to do when you have some extra fish on hand
  - (a) Take the belly out since that is the only part of the fish that will go bad after the normal period of time
  - (b) Clean out the fish and wash it thoroughly
  - (c) Fresh pack it in the ice chest and it will maintain its freshness for 2 or 3 days without odor
  - (d) The fish can be immediately wrapped and frozen individually and sold from the freezer as frozen fish
- (4) Methods vary in preserving such fish as sliced cod, hake, salmon, crab meat, oysters

c. Cutting operations for fresh fish
- (1) Washing and scaling
  - (a) All round or whole fish should be washed in cold water to remove the mucous secretion from their skin before they are scaled or dressed
  - (b) Fish are scaled, unless the scales are very small or the skin of the fish is going to be removed
  - (c) Methods of scaling
  - (d) Demonstration
- (2) Dressing and gutting
  - (a) To remove the entrails gut out the entire length of the belly from the vent (and opening) to the head. Through this opening the entire viscera can be removed with little effort.
  - (b) "Dressing" means to remove the head, to cut off the tail, and to remove all fins and any remaining viscera, blood, and membranes.
  - (c) Demonstration.
- (3) Filleting and steaking
  - (a) Cut through the flesh along the back from the tail to just behind the head.
  - (b) Cut down the backbone just above the collarbone.
  - (c) Turn the knife flat and cut the flesh along the backbone to the tail.
  - (d) Lift off the entire side of the fish in one boneless piece.
  - (e) Larger fish may be cut crosswise into steaks of one-half to 1 inch in thickness as desired.
  - (f) Demonstration.
- (4) Skinning
  - (a) After the fillets have been obtained, the skin is sometimes removed.
  - (b) Demonstration.

d. Physical facilities of department

(1) The seafood department

- **(a) Location is important**
  - **(i) Adequate working area**
  - **(ii) Proximity to coolers, receiving areas, and ice-making equipment**
  - **(iii) Adequate display area for running footage and special end of aisle displays**
  - **(iv) Relationships to meat, delicatessen, and frozen food departments**
- **(b) Effective lighting**
- **(c) Control of odors: use deodorizer daily to spray department**

(2) Tools used in the seafood department

- **(a) Fish knives, 10 and 12 inches**
- **(b) Knife-sharpening steel**
- **(c) Scissor**
- **(d) Scaler**
- **(e) Scrubbing brush**
- **(f) Ice shaver**
- **(g) Oyster ladles**
- **(h) Wooden mallet**
- **(i) Power saws**
- **(j) Rubber hose**

(3) Equipment

- **(a) Weighing scales**
- **(b) Cutting boards**
- **(c) Storage boxes**
- **(d) Conveyors**
- **(e) Coolers**
- **(f) Display cases**
- **(g) Trays**
- **(h) Tape machines**
- **(i) Sink**
- **(j) Bone and garbage containers**

(4) Sanitation as an aid to quality control

- **(a) Display case window should be thoroughly washed, inside and out, each morning and wiped several times during the day.**
- **(b) Ice should be clean, fresh, and in flakes to make the perfect setting for fresh, attractive seafood.**
- **(c) Wash fish sink daily.**
- **(d) Dispose of fish trimmings daily.**
- **(e) Clean fish case thoroughly at least once a week.**
- **(f) Soak plastic signs in detergent when needed.**
- **(g) Work tables, and all equipment should be wiped down as the employee works. Use detergent and sterilizing chemicals.**
- **(h) Walls and floors need a daily wipe-down with water and detergent.**
- **(i) Floor drains, display case drains, and garbage containers must be cleaned daily with a heavy-duty antibacterial detergent to stop odors from forming.**
- **(j) Use a high quality deodorizer several times a day in the department.**
- **(k) Clean and deodorize the walkin cooler daily.**

- (l) Throw out all sliced and round fish at close of business Saturday night.
- (m) Maintain all equipment and tools in first-class order.

e. Selling operations

- (1) Packaging for self-service
    - (a) The packaged product must be neat, attractively done, and have eye appeal.
    - (b) Place seafood in a shallow tray or on a moistureproof piece of white cardboard.
- (2) Know techniques of salesmanship and suggestion selling
- (3) Weighing
    - (a) Place fish on scale gently. Let scale settle, then price.
    - (b) Call out price and weight to customer.
- (4) Wrapping
    - (a) Use double wrap of paper.
    - (b) Wrap so that package is leakproof, odorproof, and secure.
    - (c) Tell customer whether or not seafood can be stored or frozen in this same wrapping.
    - (d) Mark price legibly on outside of package.
- (5) Techniques for increased sales
    - (a) Stock a variety of fast-moving items.
    - (b) Feature advertised and seasonable items with large displays.
    - (c) Turn over entire stock every 2 days. Fish in the case for more than 2 days will not give complete satisfaction to a customer.
    - (d) Check entire department daily to be sure it is clean and free of odors.
    - (e) Cut fish carefully to win customer's satisfaction.
    - (f) Wrap fish carefully. Use wax paper to prevent leakage.
    - (g) Be sure containers with clams or oysters are sealed tightly to prevent leakage.
    - (h) Educate the customer about seafood.
    - (i) Sell only top quality seafood.
    - (j) Advertise fish specials.
    - (k) Be sure personnel are properly trained and supervised to insure conformity to company policy.

f. Care of frozen seafood

- (1) Assign responsibility for the ordering, stocking, rotating, and the care and cleaning of the frozen food case.
- (2) Instruct carefully and follow through with periodic checkups.
- (3) Receiving deliveries
    - (a) Be ready when the order arrives.
    - (b) Get order unloaded and back under refrigeration quickly.
    - (c) Check quality and quantity of order carefully.
- (4) Care of display case
    - (a) Check the frozen seafood section at least twice a day.
    - (b) Keep a regular inventory sheet as the case is checked.
    - (c) Straighten out and "police" the case while it is being checked.
    - (d) Remove any damaged items.
- (5) Price marking
    - (a) Use a good stamp set and keep it clean.
    - (b) Price the whole case at once on the frost-free inside surface.

(c) Keep price signs clean and up-to-date.

(6) Stocking and displaying

(a) When stocking the frozen fish case, place the packages as close together as possible to prevent air spaces and to reduce the chances of thawing.

(b) Rotate the stock so that older merchandise is sold first.

(c) Use dump display when feasible for fast-moving or specially priced items.

(d) Service your display case according to a regular schedule of maintenance.

(e) Use point-of-sale material supplied by packers.

(f) In point-of-sale displays, in advertising, and in special promotions, use tie-ins frequently.

Examples: fish sticks and French fries, cod fillets and tartar sauce, shrimp and cocktail sauce, scallops and lemons, etc.

7. Supervisory Techniques

a. A supervisor is:

(1) One who inspects, examines, observes, trains, corrects, and counsels.

b. Basic needs of good supervision

(1) Knowledge of the job

(a) Product information comes from experience and study of the industry.

(b) Information on skills needed comes from experience and observation of master workers.

(c) Knowledge of supervision techniques comes from experience, innate leadership qualities, and instruction.

(2) Knowledge of responsibility must be taught by management or skilled teachers.

(3) Skill in instructing a basic requirement of supervision

(4) Skill in using a variety of methods

(5) Skill in leadership

(a) Takes a personal interest in employees.

(b) Delegates responsibilities and plans supervisory time.

(c) Listens to suggestions of salespeople and other subordinates.

c. Methods of training

(1) Individual

(a) On-the-job training takes the form of demonstration and learning by doing.

(b) Private tutoring on certain subject matter is effective: product information, company policy, etc.

(2) Group

(a) Classroom instruction may also be used to teach fundamentals of salesmanship, building on some practical experience.

(b) Meetings and workshops are effective ways of presenting special promotional campaigns, cooking demonstrations, or to introduce new company policy, products, or ideas.

(i) Enlist assistance of manufacturers' representatives and other skilled outsiders to present latest product information to employees.

d. Observing a seafood department

(1) Completeness of stock

(a) Does there seem to be too much or too little in the case for immediate needs?

(2) Overall appearance of the department

(a) Is it set up according to the company's policy?

(b) Does everything have a price ticket?

(c) Is the quality of the merchandise on display bright, firm, etc.?

(d) Are the fish odors fresh?

(3) Knowing what to look for

(a) Production, morale, gross, volume, and quality are noteworthy matters.

(b) Alertness for new ideas usually pays.

(4) Keeping an open mind

(a) Judgments must be made after the facts are known.

(b) General impressions alone are not enough.

(5) Guarding against habit in inspection

(a) Observations and suggestions should be recorded.

(b) Checklists help systematize observations.

e. Correcting and counseling

(1) A supervisor must set up high standards; he must check performance to see that people are meeting these standards.

(a) No two people can be treated the same even though they have the same problem.

(b) The same person cannot necessarily be treated in the same way at all times.

(c) People must be encouraged and given a sense of accomplishment by contributing to a worthwhile task.

(2) The supervisor should always be helpful by supporting his people, taking the time and trouble to train them and to develop them.

(a) Problems can best be solved by determining all the facts, thinking over possible solutions, arriving at the best solution, and doing what is indicated.

(3) The supervisor must follow up on his instructions to see their effect.

8. Economics of Seafood Merchandising

(1) Establishing price

a. Pricing and profits

- (a) Factors in establishing price
  - (i) Cost of advertising
  - (ii) Cost of sales
  - (iii) Merchandise handled
  - (iv) Gross profit
  - (v) Overhead costs
    - Payroll
    - Supplies
    - Water, ice, light
    - Laundry
    - Maintenance
  - (vi) Waste factors
  - (vii) Shrinkage
  - (viii) Volume
  - (ix) Customer acceptance
- (b) General principles to be considered
  - (i) Market conditions
  - (ii) Profit possibilities
  - (iii) According to categories
    - Supply
    - Movement
    - Acceptance
    - Competition
    - Quality and appearance
    - Accessibility
    - Traditional price

(2) Influences on profit in the retail seafood business

(a) Organization—Resources and qualifications

Factors	*Requisites*	*Effects*
(i) Capital	Cash and/or credit	Regulates size and volume expectancy.
(ii) Experience	Specialized training, know-how.	Lowers expense, minimizes losses.
(iii) Personality	Competent and genial nature.	Wins reputation and customer loyalty.
(b) Installation; physical setup		
(i) Space	Location-Proper area	Controls rental expense.
(ii) Layout	Attractive and practical design.	Establishes operating efficiency.
(iii) Equipment	Correct tools and facilities.	Major labor and overhead factors.
(c) Operation: methods and techniques		
(i) Care and handling.	Strict quality control	Limits losses; builds goodwill asset.
(ii) Processing	Efficient cutting and packaging.	Cuts shrinkage and supply costs.
(iii) Displaying	Productive arrangement.	Attracts "buy" appeal; sales.
(iv) Selling	Product and cooking knowledge.	Assists movement of product; volume.
(v) Management	Ability to plan work and direct personnel.	Benefits efficiency and labor costs.

(d) Administration: policies and guidance

(i) Accounting	**Maintenance of accurate records.**	**Affords cost and profit breakdown.**
(ii) Advertising and promotion.	**Merchandising program.**	**Creates demand; builds volumes.**
(iii) Sales and profit analysis.	**Set goals; evaluate results.**	**Determines current performances; predicts future trends.**

(3) Profit study

(a) Terminology

- **(i) Gross profit dollars**
- **(ii) Gross profit rate**
- **(iii) Net profit dollars**
- **(iv) Net profit rate**
- **(v) Distribution rate (to overall meat department sales)**
- **(vi) Retail dollar sales**
- **(vii) Alternate retail dollar sales**
- **(viii) Dollar cost**
- **(ix) Dollar expense**

(b) Mechanics of determining gross profit

(c) Comparative average gross profit

- **(i) A study (Harvard study of operating ratios of the National Association of Food Chain Stores) places the average gross margin of the meat departments of 7,000 stores at between 19.6 percent and 21 percent.**
- **(ii) Another study of meat departments of a group of stores averaging $25,000 a week gross sales per store shows gross margin by product group:**

Product group	*Gross profit margin* *Percent*
Beef	**16.4**
Poultry	**21.5**
Smoked meats	**22.9**
Pork	**24.6**
Lunch meats	**25.1**
Lamb	**26.1**
Veal	**27.1**
Variety meats	**29.6**
Seafood	**27.5**

(d) Formula for profit

High quality product + better merchandising methods = more favorable consumer acceptance = higher volume = higher profits.

(4) Increasing profits by proper merchandising

(a) Sell top quality seafood

(b) Push high gross profit items

- **(i) Full displays.**
- **(ii) Prominent displays.**
- **(iii) Use of advertising materials supplied by processors, seafood industry, allied industries, and the store itself.**
- **(iv) Suggestion selling.**
- **(v) Special displays.**

(c) Mix high gross profit items and high volume items.

(d) Cut and fillet merchandise correctly

- (i) Get all meat from the bones.
- (ii) Steak fish evenly.

(e) Handle frozen seafood properly
- (i) Avoid risking flavor loss; promptly put items under zero refrigeration.
- (ii) Keep a reserve supply of the fast-selling seafood items.
- (iii) Keep constant check on space allocations for frozen seafood as related to turnover and profit.
- (iv) Give serious consideration to the packaging effectiveness of the seafood products handled.

(f) Know the neighborhood: nationality, religion, race.

(g) Know and present to seafood customers recipes which stress ease of preparation.

(h) Promote seasonal items: shrimp, crabmeat, and lobster in summer; clams in winter; shad in spring; etc.

(i) Display advertised merchandise prominently.

(j) Take advantage of any special packers or industrywide promotions during Lent, Passover, "Summertime is Outdoor Fish Cookery Time," "National Fish and Seafood Month," etc.

(k) Promote tie-in selling with allied products: shrimp and cocktail sauce, scallops and lemons, crabmeat and avocados, fish sticks and French fries, smoked fish and olives, etc.

(5) Merchandise "right" on a day-to-day basis

(a) The right kind; the correct variety for the area of wholesome quality sells best. (The entire industry suffers when a customer purchases bad fish.)

(b) The right amount; lesser amounts early in the week and greater amounts Thursday and Friday are indicated.

(c) The right time; get ready for the peak periods during the slow periods.

(d) Display right; for attractiveness, by category and color will boost sales.

(e) Price right; the possibility of reduction of prices on Friday afternoon and Saturday should be planned for.

(f) Sell right; being served by a knowledgeable clerk, interested in serving the customer helps.

b. Service vs. Self-Service Seafood Operation

(1) The change has been from service to self-service seafood operation and then sometimes back to service.

(a) Self-service came about because of great success of self-service meats.

(b) Self-service resulted from constant pressure to reduce operating costs.

(c) Cost control is the decisive factor in the changeover; whenever the volume of fresh seafood does not warrant the services of a full-time fish cutter, the change to self-service is considered.

(d) Seafood becomes the forgotten factor in the meat department when seafood is changed to self-service.

(e) The same methods and packaging techniques and materials used for meat are often unsuccessfully applied to seafood.

(f) Ordering, receiving, cutting operations, and inventory control are primarily the same for fresh and pre-packaged seafood departments.

(g) There is a basic difference in display and merchandising for the two types of seafood operations.

(h) Fresh seafood (service) departments generally outsell pre-packaged (self-service) seafood departments three or four times.

(2) Service seafood is the traditional way to sell fresh seafood.

(a) Advantages

- **(i) Fish stands out as a distinct product group and it is treated with concern for its own requirements.**
- **(ii) Service operation provides personalized service for the customer. There is greater scope for variety of species and cuts, customer cutting and wrapping desires, product information, and serving suggestions.**
- **(iii) Increased sales appeal is obtained by the use of ice for display purposes.**
- **(iv) Better quality control is possible by the use of ice as the refrigerant. Melting ice helps seafood to retain its moisture content from the boats to the consumer.**
- **(v) Fresh seafood is the plus factor in the meat department because of its high gross profit margin.**

(b) Disadvantages

- **(i) There is a high labor cost for a full-time fish cutter.**
- **(ii) Waiting for service takes time for the customer.**
- **(iii) Many seafood items are prepackaged and therefore aid self-service.**
- **(iv) Inland areas are not accustomed to fresh ocean seafood and, therefore, do not merchandise it anyway.**
- **(v) The fresh seafood service department must be maintained well to be spotlessly clean and odor free.**
- **(vi) Improper and careless icing often ruins fresh seafood.**
- **(vii) Frozen seafood is thawed and sold as fresh seafood, and often refrozen. This refrozen product loses quality and sales appeal.**

(3) Self-service seafood has been tried throughout the country with varying degrees of success.

(a) Advantages

- **(i) Fresh seafood can be made available to customers of all stores. It is excellent for small stores where it would be economically inadvisable to have a service department.**
- **(ii) Cost of operation is less than for service departments.**
- **(iii) A smaller area is required.**
- **(iv) No waiting is a convenience for the customer.**

(b) Disadvantages

- **(i) Self-service means prepackaged, precleaned, and precut. This destroys the illusion of freshness.**
- **(ii) Personal contact with the customer is lost.**
- **(iii) Seafood must be displayed in open, mechanically refrigerated cases instead of its natural setting, ice. This refrigeration tends to draw water from the fish, rather than to keep it moist.**
- **(iv) Certain ethnic groups desire whole fish, which is difficult to prepackage, to maintain in this form, and does not lend itself to a package with eye appeal.**

- (v) Fish, such as haddock and mackerel, which are sold by whole weight in a service operation, must be sold by cleaned weight. The resulting price on the package seems high to the customer.
- (vi) There is discoloration of the product, especially salmon and swordfish, due to lighting and mechanical refrigeration.
- (vii) There is a lack of variety in packaging.
- (viii) In many species, there is a collection of liquid in the package, especially pools of blood.
- (ix) Often poor merchandising techniques are used.

(c) Problem areas in self-service merchandising

- (i) Prepackaging of fish for maximum sales appeal and volume

  What size, shape, absorbency, and color of tray make the most effective package?

  What type of wrapping will hold fish at high standards of quality and appearance for the greatest length of time?
- (ii) Most effective method of refrigerating fish within the limits of existing facilities

  What effect does mechanical refrigeration have on moisture content and weight of fish?

  What effect does mechanical refrigeration have on color, appearance, and quality of seafood?

  What is the best method of night care of seafood?

  Would a combination of mechanical refrigeration and the use of ice improve the holding qualities of seafood?
- (iii) Display of seafood

  What is the effect of mechanical refrigeration on fish in the package?

  What is the moisture and weight loss of seafood in the package?

  What type of display would result in higher volume of seafood sales?
- (iv) Appearance of refrozen seafood

  What is the best method for holding seafood for as long as a week?

  What are the factors affecting the appearance?

  Will some solution or treatment rejuvenate the refrozen seafood?
- (v) Fresh seafood

  What is the most effective means of transferring and delivering seafood from warehouse to store to maintain maximum quality and freshness?

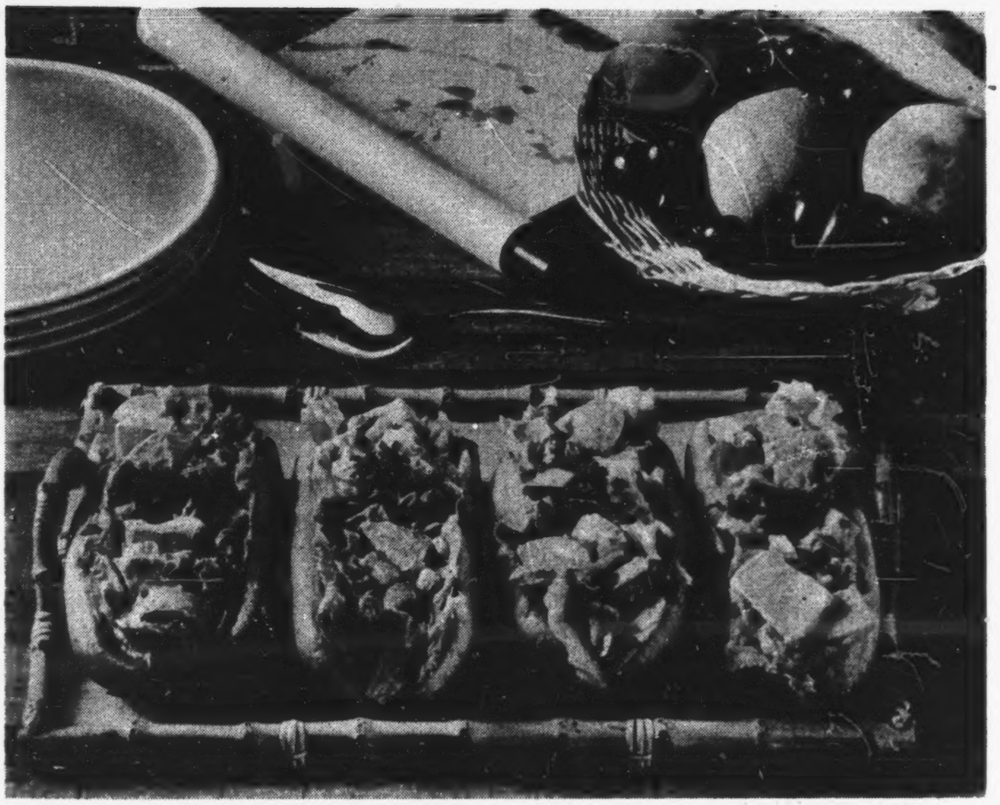
(d) Principles for the self-service department

- (i) Variety should be adequate in a large enough space.
- (ii) The department should be located in the natural flow of traffic.
- (iii) Color should be used in packages.
- (iv) Special displays on ice tables can be used to advantage for decoration and for attracting attention.
- (v) Overhead point-of-sale cards can be used as attention-getters to encourage sales.
- (vi) Newspaper advertisements can highlight one or more items.

(vii) Quality must be maintained by breaking open packages regularly to check the wholesomeness of the products. The case life of self-service seafood is often 2 days, after which products must be inspected.

9. Nutritional Value, Preparation, and Cooking of Seafood

a. Nutritional value
- (1) Factors in the purchase of food
  - (a) Nutritive value
  - (b) Appetite appeal
  - (c) Amount of waste
  - (d) Cost
  - (e) Variety of choice
  - (f) Ease of purchase
  - (g) Ease of preparation
  - (h) Ability to purchase in convenient amounts and packages
  - (i) Many medical specialists advocate the inclusion of seafood in the diet.
- (2) Constituents of any food
  - (a) Water
  - (b) Proteins
  - (c) Fats
  - (d) Carbohydrates
  - (e) Minerals
  - (f) Vitamins
  - (g) Caloric value
- (3) Proteins
  - (a) Proteins are composed of 10 essential amino acids, and seafood contains all 10 of them.
  - (b) The protein of seafood is easily and completely digested.
- (4) Minerals
  - (a) Seafoods are good sources of minerals.
  - (b) Fish, in which the bones are consumed, such as sardines, are good sources of the mineral calcium.
  - (c) Fish bones contain generous amounts of fluorine, recommended for control of tooth decay.
  - (d) Fish contain iodine which is needed for proper thyroid function.
- (5) Calories
  - (a) Seafood is generally low in calories.
- (6) Fats and oils
  - (a) Fat is important in the diet to supply energy and a certain minimum is needed for the proper functioning of the body.
  - (b) The energy value of fish fats has been estimated as equal to most animal and vegetable fats and about one quarter greater than that of butter or margarine.
  - (c) Fish oils contain vitamins A and D.



Seafood is readily adaptable to attractive food arrangements

(d) Fish fats are rich sources of the polyunsaturated fatty acids.
  (i) Polyunsaturated fats in the diet are one of the important factors in preventing or lessening the accumulation of cholesterol and other fatty materials on the blood vessel walls.

(e) Seafood, with its approximately 200 marketed varieties and the numerous market forms, can supply to the diet any degree of fat desired: oily or fat species, such as sablefish, pilchard, butterfish, or mackerel; lean species, such as cod, haddock, halibut, or shrimp; or the intermediate group composed of such species as salmon, tuna, oysters, crab, lobster, yellow perch, or flounder.

(7) Publicizing the nutritional value of seafood

(a) Coordinated industrywide public relations and advertising campaigns are needed to inform the consumer about the nutritional advantages of seafood.

(b) Local advertising in stores, in restaurants, and in publications, should emphasize seafood's nutritional values.

(c) Features of a promotional campaign on seafood might include:
  (i) Choice of fat level
  (ii) Polyunsaturated type of fat
  (iii) Well-balanced and complete protein content
  (iv) Essential vitamin and mineral content
  (v) Diversity of species, each with characteristic palate and eye appeal
  (vi) Ease of preparation for fresh, frozen, or further processed seafood

Guide to Methods for Cooking Fish

VARIETY	Fat or lean	How Cooked			
		frying Pan and deep fat	Broiling	Boiling, poaching, and steaming	Baking and planking
Blue and Sausage Pike	Lean	Excellent	Good		
Bluefish	do	Excellent	Excellent		Excellent.
Butterfish	Fat	Good	Good	Good	
Carp	Lean			Good	Excellent.
Catfish (Bullheads)	Fat				
Cod	Lean	do	Good	Good	Good.
Croaker (Hardhead)	do	do		do	Do.
Cusk	do	do		do	Do.
Flounders, Dabs, Flukes	Lean	Excellent			
Grouper	do	Good		Good	Good.
Haddock	Lean	Good		Excellent	Good.
Halibut	do	do	Excellent	Good	Do.
Herring (Lake) Cisco	Fat	do	Good		Do.
Herring (Sea) Sardine	do	do	do		Do.
King Mackerel	Fat	Good	Excellent	Good	Good.
Kingfish	Lean	Excellent	Good	do	
Lake Trout	Fat	Good	Excellent	do	Excellent.
Mackerel, Bonita	Fat	Good	Excellent	Good	Excellent.
Mackerel, Boston	do	do	do		Do.
Mackerel, Florida Span	Fat	do	do		Do.
Mullet (Popeye)	Lean	do	Good	Good	Good.
Pickerel (Jacks.)	Lean	Good	Good	Good	Excellent.
Pollock	do	do	do	Excellent	Good.
Pompano	Fat	do	Excellent		Excellent.
Porgie (Scup)	do	do	Good		Good.
Red Snapper	Lean			Good	Good.
Redfish (Ocean Perch, Rosefish).	do	Excellent	Good	do	Do.
Salmon	Fat		Excellent	Excellent	Excellent.
Sea Bass (Blackfish)	Lean	Good		do	Good.
Sea Trout (Weakfish)	do	do	Excellent		Do.
Shad	Fat		do		Excellent.
Sheepshead	Lean	Good	Good	Good	Good.
Smelts, Lake	Fat	Excellent			Do.
Smelts, Ocean	do	do			Do.
Sole	Lean	do	Good	Good	
Spot	do	Good	do		
Spotted Trout	do	do	Excellent	Good	Excellent.
Striped Bass (Rock)	Fat	do	do		Do.
Swordfish	Lean	Excellent	do		Do.
Tuna	Fat		Good	Good	Good.
White Bass	Lean	Good	Good		Good.
Whitefish	Fat	do	Excellent		Excellent.
Whiting	Lean	do	Good	Good	Good.

VARIETY	Fat or lean	How Cooked			
		Pan and deep fat frying	Broiling	Boiling, poaching, and steaming	Baking and planking
Yellow Perch	Lean	Excellent	Good		Good.
Yellow Pike	do	Good	do	Good	Excellent.
SHELLFISH					
Clams:					
Soft shell	Lean	Excellent		Excellent	
Hard shell	do	Good		do	
Oysters	do	Excellent		do	Excellent.
Crabs:					
Hard shell	Lean			Excellent	
Soft shell	do	Excellent			
Lobsters	Lean		Excellent	Excellent	
Lobsters, Rock	do			do	
Scallops, Sea	do	Excellent	Good	Good	Good.
Shrimps	do	Good	do	Excellent	

(vii) The heat-and-serve advantages of the newly developed fishery products

(viii) Economy of purchase compared to other protein foods.

(d) Samples of advertisements and displays featuring nutritional value of seafood to sell more fish.

Whether a fish is baked, broiled, steamed, etc., depends upon the fat content. As a rule, fat fish, such as shad or salmon, are preferred for baking, broiling, and planking because the fat content will keep them from drying out. Lean fish, such as haddock, are preferred for boiling, steaming, and poaching because they do not fall apart in cooking. Both fat and lean fish can be fried. The following chart is a guide to the general cooking methods for the different varieties of fish and seafood.

b. Preparation of seafood

(1) The problem

(a) People do not necessarily get good seafood when they buy it.

(b) People do not always know what to do with seafood when they get it.

(2) Edible portion of seafood based on portions of 1/3 to 1/2 pound for each person:

(a) Fish

	Percent edible
Whole or round	43 to 47
Drawn (eviscerated only)	46 to 50
Dressed (eviscerated, head and fins removed)	65 to 69
Steaks	84 to 88
Fillets	100

Seafood forms the base for appetizing meals

(b) Shellfish

(i) Live in shell Clams—Hard:

New England	15 to 20
Chesapeake	7 to 8
Middle Atlantic	10 to 12
South Atlantic	6 to 8
Pacific	24 to 28

Soft:

New England	23 to 33
Middle Atlantic	27 to 32

Oysters:

Eastern	4 to 11
Pacific	10 to 14

(ii)	Cooked in shell Crabs, Hard	10 to 18
	Dungeness	22 to 26
	Lobsters	35 to 37
(iii)	Shucked: clams, oysters, bay and sea scallops	100
(iv)	Headless, raw: Shrimp	50 to 60
(v)	Cooked meat: crabs, lobsters, shrimp	100

(3) Common cooking methods for seafood
  - (a) Pan and deep-fat frying
  - (b) Broiling
  - (c) Boiling, poaching, and steaming
  - (d) Baking and planking

(4) Basic rules for cooking seafood
  - (a) Make allowances for fat content, which varies with the species.
    - (i) Fat may be added by basting when cooking lean fish.
    - (ii) Fat fish lose some of their fat in cooking.
  - (b) Fish is often overcooked
    - (i) Cooking just enough to enable the flesh to be flaked easily from the bones will leave the fish moist and tender and bring out the flavor.
  - (c) Use sauces, relishes, and garnishes according to the cooking method of the seafood.

c. Demonstration

(1) List of sources of information on preparation of seafood
  - (a) Texts and cookbooks
  - (b) Periodicals
  - (c) Local publications
  - (d) Processors and packers
  - (e) Allied industries
  - (f) Associations
  - (g) Utility companies
  - (h) Governmental agencies

(2) Demonstration of preparation, cooking, and serving of seafood

(3) Taste test

(4) Sampling of dishes prepared

(5) Distribution of recipes and menus for seafood

10. Trends in Seafood and Seafood Merchandising

a. Changes in consumer preference

(1) Seafoods are not as regional as they formerly were. Modern transportation and preservation methods make local fish, such as the red snapper of Florida, available and accepted throughout the United States.

(2) The consumer desires convenience items in the form of heat-and-serve dishes and dinners and easy-to-prepare foods.

(3) The consumer shows a growing dependence on the voluntary program of inspection and grading of fishery products by the U.S. Department of the Interior.

(4) Consumer groups are independently testing seafood products in an attempt to help raise standards for the seafood industry.

b. Latest products and methods

(1) Trends in seafood merchandising

- (a) Fresh fish and shellfish departments, once limited to coastal and lake-front supermarkets, are finding their way into many more inland stores, due to:
  - (i) New packaging methods
  - (ii) Fast deliveries
  - (iii) High markup
  - (iv) The prestige that a fresh fish department carries
- (b) Some supermarkets that generally carry only frozen seafood, make an effort to carry a line of fresh seafood for at least the important merchandising seasons like Lent.
- (c) Combination service and self-service seafood departments are popular.
- (d) Related or suggestion merchandising is stressed by the display of jars of tartar sauce, hot sauce, lemon juice, monosodium glutamate, and cracker crumbs either directly on packages of fish or atop the case.
- (e) Lobster tanks, popular on the East Coast, are being utilized in more inland stores.
- (f) Fresh shrimp, scallops, clams, and even squid are making appearances in inland stores, but most supermarkets prefer to sell frozen varieties.

(2) New processes in development

- (a) Fish protein concentrate (FPC) is being developed from fishery by-products with the water and oil removed to form a dry protein and mineral product, ground into a powder.
  - (i) This fish flour can be used as a food supplement in mass feeding programs for people who are nutritionally deficient.
  - (ii) It is an animal protein concentrate which can be added in small amounts to local dishes, so that no alteration in food habits is necessary.
  - (iii) It can be used as a food supplement in "underdeveloped" countries where complete proteins or calcium may be missing in the diet.
  - (iv) It also has use as a flavoring and seasoning agent.
  - (v) There is great potential for FPC as an ingredient in "derived foods" or "constructed foods" for the future.
- (b) Preservation
  - (i) Antibiotics
  - (ii) Radiation preservation
  - (iii) Freeze-drying (vacuum dehydration)
- (c) Packaging
  - (i) Vaporproof seals
  - (ii) "No drip on thawing" processes
  - (iii) Plastic and "poly" wrappings

- (d) Food industry trends affecting seafood
    - (i) Uniform codes for the transportation and handling of frozen food at 0° F. are gaining acceptance by various States.
    - (ii) Frozen food preservation advances will help in quality control, i.e., time-temperature indicator to determine whether exposure to high temperatures for a period of time has affected the quality of the food.

11. Government Role in Seafood Merchandising

a. Legislation and agencies affecting the seafood industry
- (1) Fishing laws and regulations, primarily on the State and county levels.
- (2) Sanitation of shellfish, food handling and selling, Public Health Service, U.S. Department of Health, Education, and Welfare.
- (3) Pure Food and Drug Act, Food and Drug Administration, U.S. Department of Health, Education, and Welfare.
- (4) Inspection and grading standards, U.S. Department of the Interior.
- (5) Fair trade practices, Robinson-Patman Act, Sherman Anti-Trust Act, etc.

b. Meeting foreign competition as a Government responsibility
- (1) Our imports of fishery products are great and ever increasing.
- (2) Huge, modern fishing vessels, including factory ships, are used by the U.S.S.R. and Japan.
- (3) In other countries, the fishing industry is subsidized by the government, and the industry is driven by the need for seafood as a primary food source.
- (4) International commissions have been organized to preserve certain fishing grounds and certain species.

c. The Bureau of Commercial Fisheries, Branch of Marketing, U.S. Department of the Interior.
- (1) Purpose: To promote the free flow of domestically produced fishery products in commerce.
- (2) Marketing Programs.
    - (a) Market Development
    - (b) Market Promotion
    - (c) Marketing Research and Analysis
    - (d) Home Economics
    - (e) Visual Education
- (3) Activities.
    - (a) To cooperate with mass publicity media in connection with seafood promotion, fish cookery demonstrations, lectures, pictures, textual material, assistance, and advice

        (b) To promote domestic commodities that are in oversupply
        (c) To correct supply-demand imbalance
        (d) To publish materials of interest to the seafood industry
    (4) Cooperating agencies.
        (a) Other Federal Governmental groups
        (b) State
        (c) Seafood trade
        (d) Allied industries
        (e) Mass media groups
d. Research activities of governmental agencies
    (1) Experiments are being made on a new fishing vessel, equipment, and methods.
    (2) Ships and personnel are sent to explore little-known areas of the sea, such as the Indian Ocean and the tropical Atlantic Ocean.
    (3) Scientists are studying the habits of fish and other sea creatures trying to find ways to improve catches through knowledge of how sea creatures behave.
    (4) Sonic and radar devies being used to locate fish in new and old fishing grounds are often useful at new depths.

Appendix

I. Sources of Instructional Materials [1]

A. Governmental Agencies

1. International
   - Food and Agriculture Organization of the United Nations
   - International North Pacific Fisheries Commission (Also other commissions)
   - Organization for European Economic Cooperation
   - Fisheries Research Board of Canada
   - White Fish Authority of London, England
2. Federal
   - U.S. Department of Agriculture, Agricultural Marketing Service
   - U.S. Department of Commerce, Bureau of the Census
   - U.S. Department of Health, Education, and Welfare, Office of Education, Division of Vocational and Technical Education, Distributive Education Branch and Trade and Industrial Education Branch
   - U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Commercial Fisheries
   - U.S. Department of Labor, Bureau of Labor Statistics
3. State
   - All States may provide instructional material, but especially:
   - Florida State Board of Conservation, Tallahassee
   - State of Maine, Department of Sea and Shore Fisheries, Augusta
   - Commonwealth of Massachusetts, Division of Marine Fisheries, Department of Natural Resources, Boston
   - Department of Fisheries, Seattle, Wash.

B. Associations

These include international, national, regional, and some local associations of individuals and groups involved in the fishing or seafood industries and related groups interested in some phase of seafood merchandising.[2]

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[1] A bibliography of articles, speeches, pamphlets, books, Government publications, and periodicals is available from the U.S. Department of the Interior, Bureau of Commercial Fisheries, Branch of Marketing, Washington, D.C., 20240.

Many State and local associations, not listed here, will also help identify individuals, groups, and local issues of seafood merchandising. These can help the advisory committee.

American Fisheries Society
American Seafood Distributors Association
American Tunaboat Association
Association of Pacific Fisheries
Atlantic States Marine Fisheries Commission
Boston Fisheries Association, Inc.
California Seafood Institute
Canned Salmon Institute
Chesapeake Seafood Packers Association
Federated Fishing Boats of New England and New York, Inc.
Fisheries Council of Canada
The Fishery Council, Inc.
Glass Container Manufacturers Institute
Gulf and Caribbean Fisheries Institute
Gulf States Marine Fisheries Commission
Halibut Association of North America
Maine Sardine Council
National Association of Food Brokers
National Association of Food Chains
National Association of Retail Grocers of the United States
National Canners Association
National Council of American Importers, Inc.
National Fisheries Institute, Inc.
National Restaurant Association
National Shellfisheries Association
National Shrimp Breeders Association
National Shrimp Congress, Inc.
New Bedford Seafood Council
New England Fish Exchange
North Atlantic Lobster Institute
Northwest Fisheries Association
Oyster Institute of North America
Pacific Coast Clam Packers Association
Pacific Coast Oyster Growers Association
Pacific Herring Packers Association
Package Designers Council
Quartermaster Food and Container Institute for the Armed Forces
Refrigeration Research Foundation
Shrimp Association of the Americas
South African Rock Lobster Association, Inc.
Southeastern Fisheries Association, Inc.
Super Market Institute, Inc.
Tri-State Packers Association, Inc.
Tuna Research Foundation
U.S. Trout Farmers' Association
West Coast Shrimp Producers Association

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[2] *See also* List of Fishery Associations in the United States. Fishery Leaflet No. 254, Bureau of Commercial Fisheries, U.S. Department of the Interior.

II. List of Seafood Merchandising Clinics Previously Conducted

(Place held, student level of course, initiating group or coordinator, and address)

A. Offered under auspices of Government, industry, and/or distributive education:

CALIFORNIA—Los Angeles
For wholesalers (and proposed for retailers)
Coordinated by Fishery Marketing Specialist (with D.E.), Bureau of Commercial Fisheries, U.S. Department of the Interior, Terminal Island, Calif.

GEORGIA
For restaurant personnel
Coordinated by Distributive Education Service, Seafood Training Consultant, State of Georgia, Department of Education, Atlanta 3, Ga.

MASSACHUSETTS—Boston, Springfield, Worcester
For retailers
Coordinated by Fishery Marketing Specialist (with D.E.), Bureau of Commercial Fisheries, U.S. Department of the Interior, Boston, Mass.

NEW YORK—Nassau County
For retail chain store personnel
Coordinated by Coordinator, Distributive Education, County of Nassau, Mineola, N.Y.

OREGON
For mass feeding outlets, consumers, wholesalers, retailers
Coordinated by Superintendent, Seafoods Laboratory (with D.E.), Oregon State College, Astoria, Oreg.

PENNSYLVANIA—Philadelphia, Wilkes-Barre, Pittsburgh
For wholesalers and retailers
Coordinated by Director, Distributive Education Department, Temple University, Philadelphia, Pa.

B. Offered as part of the curriculum of universities and schools:

Cornell University, School of Hotel Administration Course: Hotel Meats, Poultry, and Fish

Food and Maritime Trades Vocational High School, New York
Course: Meat Merchandising

Gloucester, Mass., Vocational School
Course: Fisheries and Vessel Management

University of Michigan, Department of Fishery Technology
Course: Fishery Technology and Economics

C. Offered by chain supermarkets as part of their training programs:

Food Fair Stores, Philadelphia, Pa.

The Great Atlantic and Pacific Tea Co. (A&P) National Fish Headquarters, Boston, Mass.

Penn Fruit Co., Philadelphia, Pa.

Safeway Stores, Inc., Oakland, Calif.

Stop and Shop, Inc., Boston, Mass.

III. U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Commercial Fisheries

A. Activities [1]

The Bureau of Commercial Fisheries, through its Division of Industrial Research, aids in maintaining the welfare of the commercial fisheries of the United States and its territories by conducting research, investigations, and studies, and by providing services which include:

1. Investigations to improve and develop methods for catching, handling, processing, preserving, storing, transporting, and marketing of fishery products and industrial products.
2. Determination of the composition, properties, and nutritive value of fishery products and industrial products.
3. Development and improvement of fish cookery.
4. Improvement or correction of sanitation practices and plant operation through advisory and inspection services.
5. Exploratory fishing operations to determine the character, extent, and availability of resources and to test, devise, and demonstrate most effective gear and vessel types.
6. Development and increase in markets for domestic fishery products by assisting the industry in problems of production and distribution.
7. Conduction of an educational service to promote the free flow of domestic fishery products in commerce.
8. Conduction of economic research on production, transportation, marketing, and consumption aspects of the fishing industry, including research on costs, price trends, labor problems, etc.

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[1] Training Programs for Fishery Occupations. Washington: U.S. Government Printing Office, 1961. (U.S. Office of Education, OE #8-1025.)

9. Conduction of studies and preparation of working documents, position papers, and reports on foreign and domestic fisheries as requested; conduction of studies and provision of services on foreign trade and tariff problems and services of the fishery attaché and foreign fishery reporting programs.
10. Collection of data on the activities of fishery cooperatives as required to assure their conformity with the provisions of the Fishery Cooperative Marketing Act.

Specific field operations are carried out by the several branches of the Division of Industrial Research through field office. Personnel in the central office in Washington, D.C., exercise staff supervision over field operations which are directly supervised and coordinated by regional or area directors.

Regional and Area Offices

REGION 1 (PACIFIC REGION)—6116 Arcade Building, 1319 Second Avenue, Seattle 1, Wash.

REGION 2 (GULF AND SOUTH ATLANTIC REGION)—Don Ce-Sar Federal Center, Box 6245, St. Petersburg Beach, Fla.

REGION 3 (NORTH ATLANTIC REGION)—Post Office Building, Gloucester, Mass.

REGION 4 (GREAT LAKES AND CENTRAL REGION)—5 Research Drive, Ann Arbor, Mich.

REGION 5 (ALASKA REGION)—Federal Building, Box 2481, Juneau, Alaska

CALIFORNIA AREA OFFICE—101 Seaside Avenue, Terminal Island, Calif.

HAWAII AREA OFFICE—2570 Dole Street, Box 2830, Honolulu, Hawaii

Branches of the Division of Industrial Research:

Branch of Technology
Branch of Economics
Branch of Marketing
Branch of Exploratory Fishing
Branch of Foreign Fisheries and Trade

B. Fishery Legislation Relative to Research and Training

1. Act of July 1, 1954, as amended (Sometimes known as the Saltonstall-Kennedy Act of 1954); Public Law 1024

   Directs the Secretary of Agriculture to transfer annually to the Secretary of the Interior, funds made available under the terms of the Agricultural Adjustment Act of 1935, an amount equal to 30 percent of the gross receipts from customs duties collected on fishery products. Such funds are to be used by the Secretary of the Interior to promote the free flow of domestically produced fishery products by (1) conducting a fishery educational service and research program, including the use of vessels or other facilities; (2) developing and increasing markets for domestically produced fishery products; and (3) conducting various types of research pertaining to American fisheries. The Secretary is also authorized to acquire and dispose of surplus fishery products.

2. Act of August 8, 1956 (Sometimes known as the Payne Act); Public Law 1027

"To promote the fishing industry in the United States and its territories by providing for the training of needed personnel for such industry. . . ."

Authorizes grants to educational institutions to promote education and training of scientists, technicians, and teachers needed in the field of commercial fishing. Also amends the Vocational Education Act of 1946 (George-Barden Act) to authorize assistance to States and Territories in the development of vocational education in the fishery trades and industry, such assistance to be apportioned as determined by the U.S. Commissioner of Education after consultation with the Secretary of the Interior.

Provides up to $375,000 per year for vocational education in the fishery trades and distributive occupations therein in the several States and Territories in the United States. This program is administered by the Department of Health, Education, and Welfare, with the Department of the Interior providing consultant services.

IV. References on Seafood Merchandising

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Pacific Fisherman. Yearbook number.

Packaged Fishery Products. Current Fisheries Statistics. U.S. Department of the Interior. Annual.

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SL–8—Wholesale Dealers in Fishery Products, Pennsylvania, 1962

SL–109—Firms Canning Caviar and Fish Roe, 1959

SL–161—Producers of Packaged Fish, 1961

SL–162—Firms producing Fish Sticks and Portions, 1961

Sampling of name and address lists available for all States and all phases of the fishing industry.

Yearbook of Fishery Statistics. Food and Agriculture Organization of the United Nations. Annual.

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